This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

LSoc1808.20 Bd. Feb. 1892.

Harvard College Library

FROM

Royal Irish Academy.

7 Nov. 1864 - 17 Aug. 1870.

THE

TRANSACTIONS

OF THE

ROYAL IRISH ACADEMY.

VOLUME XXIV.,

~~PART II.~~—POLITE LITERATURE.

DUBLIN:
PUBLISHED BY THE ACADEMY.
1867.

23½.93

1864, Nov. 7 –
1870, Aug. 17.
Gift of the academy.

THE ACADEMY *desire it to be understood, that they are not answerable for any opinion, representation of facts, or train of reasoning, that may appear in the following Papers. The Authors of the several Essays are alone responsible for their contents.*

DUBLIN: PRINTED AT THE UNIVERSITY PRESS, BY M. H. GILL, PRINTER TO THE ROYAL IRISH ACADEMY; AND SOLD AT THE ACADEMY HOUSE; ALSO BY HODGES, FOSTER, & CO., 104, GRAFTON-STREET, DUBLIN; AND WILLIAMS & NORGATE, 14, HENRIETTA-STREET, COVENT GARDEN, LONDON.

CONTENTS.

POLITE LITERATURE.

PAGE

On the Collation of a MS. of the Bhagavad Gîtâ. By DENIS CROFTON, *B. A., M. R. I. A.*, ... 3

On the Assyrio-Babylonian Measures of Time. By the REV. EDWARD HINCKS, *D. D.*, ... 13

On the various Years and Months in Use among the Egyptians. By the REV. EDWARD HINCKS, *D. D.*, ... 25

On the Science of Language. By the REV. JAMES BYRNE, *A. M.*, . . 67

On the Rudiments of the Common Law discoverable in the published Portion of the Senchus Mor. By SAMUEL FERGUSON, *Q. C., LL. D.*, . . 83

NOTE.—Papers in Polite Literature will no longer form a separate branch of the TRANSACTIONS, but will be published with those on Antiquities, as together forming one section. The Transactions, therefore, instead of being divided into three sections, will consist of two, namely, "Science," and "Polite Literature & Antiquities," as is the case in the PROCEEDINGS of the Academy.

The Volumes of the Transactions (as well as of the Proceedings) will in future consist of Papers in either of these sections *exclusively*; so that, though Parts of each may be issued concurrently, their pagination will be distinct, and they will not, as heretofore, form sections of the same volume.

TRANSACTIONS

OF THE

ROYAL IRISH ACADEMY.

VOLUME XXIV.

POLITE LITERATURE.

POLITE LITERATURE.

I.—*On the Collation of a MS. of the Bhagavad-Gîtâ.* *By* Denis Crofton, *B.A., M.R.I.A.*

Read June 14, 1858.

THE subject to which I intend to call your attention is a Collation of one of the two MSS. of the Bhagavad-Gîtâ which are in the Library of Trinity College, Dublin, with the printed text. The Bhagavad-Gîtâ is a philosophical poem, in Sanskrit, inserted as an Episode in the great Indian Epic Mahâbhârata, and is divided into eighteen chapters, containing seven hundred ślokas, or verses. The name most literally rendered would be the song of that which possesses happiness, from भग (*bhaga*), "happiness," and the root गै (*gai*), "to sing;" but it does actually mean "The song of the Lord," from Bhagavat, a common term for a saint or Deity, used as an appellation of Kṛiṣṇa. Who the author was is unknown; but he must have been a person of great acuteness and research in the philosophical systems of India. Neither have we any certainty as to the date; but it may probably be assigned to a century or two before the Christian era.

Our poem opens during the war between the Kurus and Pâṇḍavas, respectively the elder and younger branches of an ancient tribe of northern India, whose wars form the great subject of the Mahâbhârata; and it is carried on by means of a dialogue between Kṛiṣṇa and Arjuna. Of these two principal actors, I may mention that the latter is general of the Pâṇḍavas, and is supposed to be accompanied in his chariot by Kṛiṣṇa, the most renowned of the demi-

gods in the Indian Pantheon. Into his mouth are put the didactic lessons brought forward by the author. In order to understand the teaching imparted by him, we must recollect that according to the Sân-khya Philosophy of Kapila, which in the main is that of the Bhagavad-Gîtâ, मोक्ष (*moksa*), or liberation of the soul from matter, so that it shall no more be subject to transmigration, and may become absorbed into Brahman, or the Divine Essence, is the great good to be looked forward to by man; and this emancipation was to be obtained by means of योग (*yoga*), or absorption in God. This *yoga* was of two kinds:—The first, the *Jnânayoga*, or absorption through knowledge,—of the school of Patańjali, which was an ascetic system,—carried on by contemplation, and renunciation, सन्न्यास (*sannyâsa*), of the world, with literal retirement from it. The second *yoga* is that of the author of the Bhagavad-Gîtâ, which is called the *Karma yoga*, or union with God by actions, to be effected through the agent's fulfilling all the duties of the state in which he was born on earth—simply as duties—or necessities, and without being influenced by human interests or motives. In this way also, according to our author, is "renunciation" to be obtained. This may be considered the peculiar *doctrine* of the Bhagavad-Gîtâ. The end and object to be subserved by the whole poem is obviously to teach the imperative necessity of performing the duties of *caste*, as the entire colloquy in which it consists takes its rise from Arjuna's unwillingness to fight with the Kurus, whose army contained those who were related to him by blood—he himself being a Ksatriya, or person of the second order of *caste*, which was that of kings and warriors. This indisposition to fulfil his *caste* duties is combated, and finally overcome by the arguments of Krisna.

With respect to the printed text of the Bhagavad-Gîtâ, I may mention that we have it in the following forms, i.e. printed at Bombay, 1842; in the Calcutta edition of the Mahâbhârata; in two Calcutta editions, 1809 and 1832; and in two editions published at Bonn, the first in 1823, edited by Schlegel; and the second in 1846, edited by Lassen. This latter was republished at Hertford, in 1855, by Mr. J. Cockburn Thomson, with some slight variations, specified in the preface. It is this text which I have used in the collation of the MS.

The MSS. of the Bhagavad-Gîtâ which have been already made use of in Europe, for critical purposes, amount to thirteen in number, and these have been collated by Schlegel and Lassen. They are all said to exhibit a remarkable degree of coincidence.

In reference to the MS. which I have collated, and which is numbered M, 3, 38, in the MS. catalogue, it may be observed that it is written on paper, in the Devanâgarî character, and at the end has the date संवत् १८८५ *samvat* 1885, which, as the *samvat* or era of Vikramâditya, begins B. C. 56, gives the date of A. D. 1829 for the writing of it; consequently it is subsequent even to some of the printed editions. Its different readings are exceedingly numerous; but, excepting in two instances, which shall be particularized farther on, not of very great importance. The man who wrote it was evidently not an individual of learning, and his mistakes and errors seriously detract from its value for critical purposes.

A specimen or two of his inaccuracies may be given. First, with reference to—

Ch. I., śl. 31 निमित्तानि च पश्यामि विपरीतानि केशव

nimittâni ca paśyâmi viparîtâni keśava

"And I see infelicitous omens, oh fair-haired one!"

Here the scribe makes a blunder which is of constant occurrence with him, that is, he writes "Keśava," with *visarga*—thereby transforming it into a nominative,—which yields no sense. This mistake he makes repeatedly with vowel crudes, writing them with *visarga* of the nominative, when the sense requires a vocative.

Here is another instance in which he has failed both in orthography and grammar:—

Ch. XII., śl. 20 ये तु धर्म्यामृतम् इदं यथोक्तं पर्युपासते
श्रद्दधाना मत्परमा भक्तास् ते ऽतीव मे प्रियाः

yê tu dharmyâmritam idam yathoktam paryupâsate
śraddadhânâ matparamâ bhaktâs tê 'tîva mê priyâs

"But those who sit round this righteous nectar, as here pronounced, believing and quite given up to me and faithful, they are exceedingly dear to me."

Here "mê priyâs," "dear to me," is written "mêtpriyas," with a "ta" faultily inserted between the words, and a long "a"—which would have been

correct—obliterated, thereby transforming "priyâs" in the plural, into "priyas" in the singular, although it should be plural to agree with yê and tê "they who."

Here again his misspelling takes away sense from a passage:—

Ch. II., sl. 29 आश्चर्यवत् पश्यति कश्चिद् एनम्
आश्चर्यवद् वदति तथैव चान्यः

âśćaryavat paśyati kaśćid enam
âśćaryavad vadati tathaiva ćânyas

"One looks on this (the soul) as a miracle—and thus indeed another speaks of it as a miracle."

Here "vadati," "speaks," is written "dhadati," which has no meaning.

I have given these examples, and similar instances might be multiplied extensively, in order to show that much reliance cannot be placed on the readings of this MS., unless borne out by other authorities, or commending themselves by their own intrinsic excellence. The various readings, as has been already observed, are very numerous; and as it would be a waste of time to read out the whole of the collations (which occupy sixteen pages of foolscap paper), I have selected those passages which will be of the greatest interest, and for this purpose, taken the list of principal points of difference between Lassen's Bonn edition of 1846, the various MSS., and the other editions, given by Mr. J. Cockburn Thomson in the advertisement to his edition of the text. With these I have compared the corresponding readings of the MS., and classified them according as they support Lassen's edition or the other authorities. The result is, to show a preponderance in favour of Lassen. I shall first give the readings which support his edition, and afterwards those which support the other authorities.

First, the MS. supports Lassen's text of 1846—

Chapter.	Ślokas.	In	Against	Of
V.	26	यतीनां	यनिनां	Calcutta Edition.
IX.	33	भक्ता	भकत्या	Calc. Ed.; MS. D. Paris and Berlin MS.
X.	41	ऊर्ज्जितम् = ऊर्जितं	वर्जितं	Calcutta Edition.
,,	42	ज्ञानेन	ज्ञातेन	Calc. Ed.; Calc. Ed. Mah.; and Berlin MS.
XI.	7	इहैकस्थं जगत्	इहैकं यज्जगत्	Calcutta Edition.
,,	28	अभिविज्वलंति	अभितो ज्वलन्ति	Calc. Ed. Mah.; and Berlin MS.
XVIII.	12	त्यागिनां	त्यागीनां	Calcutta Edition.
,,	28	नैष्कृतिको	नैकृतिकः	Calc. Ed. Mah.; and two London MSS.
,,	35	विमुंचति	विमुंचन्ति	Calcutta Edition.
,,	64	दृढमतिस्ततो	दृढस्तमितितो	Calc. Ed. (misprint).
,,	75	गुह्यमहं	गुह्यतमं	Calc. Ed. Mah.; and No. 5 E. I. House.

Although the words have been misspelt in the MS., it probably supports Lassen's text in—

Chapter.	Ślokas.	
I.	8	सौमदत्तिस्तथैवच For
		सौमदत्तिस् तथैव च = Lassen, as given in Mr. Thomson's text, not
		सौमदत्तिथैवच = Reading of "Bonn Edition," as given in his table page vi., or
		सौमदत्तिर्जयद्रथः = Reading of the Calcutta Edition of the Mahâbhârata.

So also—

Chapter.	Śloka.	In	Against	Of
I.	37	सवाधवान् for सबान्धवान् (Lassen)	स्वबान्धवान्*	Calc. Ed. Mah.; and No. 5 MS. in E. I. House.
XVI.	13	लब्धमिमं for लब्धमिमं (Lassen.)	लबध्वमिदं	Calcutta Edition.

As the scribe does not write an apostrophe to express the elision of the short "a," it is indeterminate whether the MS. reads in—

Chapter.	Śloka.			
II.	14	ऽनित्यास् for ऽनित्यास् = (Lassen.)	or नित्यास् for नित्याः	Of Calc. Ed. of Bhagavad-Gîtâ.
VIII.	19	ऽवशः = (Lassen.)	or वशः	Of Calcutta Edition.
,,	20	ऽव्यक्तो व्यक्तात् for ऽव्यक्तो व्यक्तात् = (Lassen.)	or व्यक्तो ऽव्यक्तात् for व्यक्तो ऽव्यक्तात्	Of Calcutta Edition.

Secondly, the MS. supports "other readings," given by Mr. Thomson—

Chapter.	Śloka.	In	Of	Against, in Lassen's text.
III.	23	वर्त्तेयं (= वर्तेयं)†	Calc. Ed.; Calc. Ed. Mah.; and Lond. MSS.	वर्तेय
VI.	39	एतन्मे (= एतद् + मे)	Calc. Ed.; Calc. Ed. Mah.; and the Schol.	एतं मे
VIII.	8	चेतसानान्यगामिना	Calc. Ed.; Calc. Ed. Mah.; and four Lond. MSS.	चेतसानन्यगामिना

* Reading of Mr. Thomson's text.. † Reading of Mr. Thomson's text.

Chapter.	Śloka.	In	Of	Against, in Lassen's text.
IX.	7	मामिकां*	MSS. B & D Paris; five MSS. Lond.; & Calc. Ed. Mah.	मामकीं
XI.	2	भवाप्ययौ	Calc. Ed. Mah.	भवव्ययौ
,,	8	शक्यसे	All the MSS. and Editions.	शक्ष्यसे
,,	16	विश्वरूपं	Calc. Ed.; and Calc. Ed. Mah.	विश्वरूप
,,	41	तवेदं	Calc. Ed.; Calc. Ed. Mah.; and three Lond. MSS.	तवेमं
,,	43	गुरूर्	Calc. Ed.; Calc. Ed. Mah.; and No. 5 E. I. House.	गुरोर्
XVIII.	66	मोक्षयिष्यामि	Calc. Ed.; Calc. Ed. Mah.; and No. 5. E. I. House.	मोचयिष्यामि
,,	78	ध्रुवा नीतिर्मतिर्	Calc. Ed.; and all Paris MSS.	ध्रुवाणीति मतिर्

In addition to the readings which have been already discussed, Mr. Thomson gives a second short list of some in which his text differs from that of Lassen. A few of these have appeared in the lists already given; and of the remainder there are not any which are supported by the MS.

I shall now proceed to the two passages which are of greatest interest.

The first of these is an additional śloka at the beginning of chap. xiii., which I believe has been hitherto only known to exist in one MS., D, at Paris, two in London, one at Benares, and in the Calcutta edition of the Mahâbhârata. It is, however, also in *both* the MSS. of Trinity College. It is as follows:—

॥ अर्जुन उवाच॥ प्रकृतिं पुरुषं चैव क्षेत्रं क्षेत्रज्ञमेवच।
एतद्वेदितुमिच्छामि ज्ञानं ज्ञेयं च केशव॥

‖ Arjuna uvâcha ‖ Prakṛitim puruṣam ćaiva kṣetram kṣetrajńamevaća
Etadveditumiććhâmi jńânam jńeyam ća keśava.

"And both, oh fair-haired one! (Kṛiṣṇa), nature and mind, and also body and spirit, knowledge, and what can be known, that I desire to know."

* Reading of Mr. Thomson's text.

This śloka appears as above in the MS. M, 3, 38, excepting that the "j" of Arjuna is doubled under the "ra," and there is no "ć" in icćhâmi.

The second Trinity College MS. of the Bhagavad-Gîtâ* also contains this śloka as above, excepting that the mystic syllable ओम् (*Om*) is placed before "prakṛitim," "ćeva" is put for ćaiva, and there is no "ć" in icćhâmi. Consequently the number of known MSS. which contain this śloka is now represented by six, instead of four.

But we now come to the most interesting fact connected with the text of the Bhagavad-Gîtâ, as it appears in the MS. M, 3, 38:—This is, that it contains a śloka which is, I believe, entirely new to Sanskrit literature, and hitherto unknown. I have been unable to discover any trace of its existence, except in this MS. It occurs as a *second* thirty-fourth śloka in chapter x., and during Kṛiṣṇa's enumeration to Arjuna of the attributes which belonged to himself in consequence of his identification with the Supreme Being. It is as follows:—

वोषधिनां जवश्चास्मी धातुनामस्मि कांच।
सर्वेषां विणजातिनां दर्भोह पांडवनंदन॥

vosadhinâm javaśćâsmi dhâtunâmasmi kâńća
sarvesâm vinajâtinâm darbhoha pâṇḍavanandana.

This passage is obviously corrupt. We know of no word from which "vosadhinâm" could be derived, either with its first syllable in "vo," or in u, or û, combining with a previous va, or vâ, into "vo" by vowel sandhi. Further, "asmi," the 1st person present from the root अस् (*as*), "to be," should have its final short, and "dhâtunâm," which is obviously meant for the genitive plural of a crude in "u" should have its penultimate long. "Kâńća" is only part of a word.

Similarly, in the second line we do not know of any word beginning with "vina," whence "vinajâtinâm" could be deduced; and it, as well as "vosadhinâm" in the previous line, if it come from a vowel crude, as it obviously does, should have its penultimate long, as a genitive plural. Farther, "darbhoha" wants a final *anusvâra*. Finally, the line is a syllable too long.

* Written on a roll, and kept in a case.

These grammatical reasons show the passage to be spurious, or, at least, very corrupt. It seems an extraordinary thing, also, that the usually occurring thirty-fourth śloka should first have been given in the MS., and then this. Possibly the scribe may have found each in different MSS., and then incorporated *both* in his own copy, from not knowing which was the correct one. He has numbered each of them with "34."

There is, however, another reason that may possibly account for the double numeration, which is, to prevent the poem from containing, in appearance at least, more than 700 ślokas, and it would have 702, if the genuineness of this passage, and that of the additional verse at the beginning of the thirteenth chapter, which has been already alluded to, were admitted. I am confirmed in the belief of the probability of this supposition, from the fact that in the thirteenth chapter the ordinarily occurring first and second ślokas have both been marked with "2," thereby bringing in the first verse as given in the MS., without increasing apparently the number of ślokas. So, very possibly, may have been done in the tenth chapter with the two thirty-fourth verses; and it may have been considered that, by this arrangement, a violation of the well-known number of ślokas in the poem was obviated.

The following emendation of this passage has been proposed, which adheres pretty closely to the original, and at the same time yields an excellent sense:—

ओषधीनां जवा चास्मि धातूनामस्मि काञ्चनं ।
सर्वेषां तृणजातीनां दर्भोहं पांडुनंदन ॥

Oṣadhînâm javâ câsmi dhâtûnâmasmi kâñcanam
Sarveṣâm tṛinajâtînâm darbhoham pâṇḍunandana.

"I am the China rose* amongst plants, and I am gold amongst metals;
Of all herbs I am the kuśa, O son of Paṇḍu!"

This passage, as emended, forms a verse quite worthy to take its place in the poem, and its contents show a very suitable adaptation to the context; for, in the address to Arjuna, in which it occurs, Kṛiṣṇa describes himself as the leading object amongst the several classes which he enumerates—for instance, as

* Hibiscus rosa Sinensis.

the lion amongst animals; the Ganges amongst rivers, &c. So here he represents himself as the China rose, and gold, amongst plants and metals. Also, he describes himself as the Kuśa.* This herb would be one of first rank in the Hindoo mind, as from it was furnished the बर्हिस् (*barhis*), or bed of sacred straw, on which the oblations were placed, and to which the gods were invited to come, in the Veda. However, the passage must obviously be rejected as spurious, from the fact of there being no known evidence of its existence except in this MS.

This passage does not occur—at least in its place in the tenth chapter—in the other Trinity College MS. of the Bhagavad-Gítâ.

* Poa cynosuroides.

II.—*On the Assyrio-Babylonian Measures of Time. By the* Rev. Edward Hincks, D. D.

Read 10th April, 1865.

1. THE present paper is intended to establish some truths respecting the Assyrio-Babylonian measures of time which are not generally admitted, but which I should like to assume as proved in two other papers which I have planned and partially written. The subject of the one is "The Various Years and Months in Use among the Egyptians;" that of the other is "The Comparative Chronology of the Babylonians, Assyrians, Jews, and Egyptians, from the Commencement of Ptolemy's Canon." On these two subjects I believe that very great errors have been put forward by persons who are deservedly looked up to as authorities; and I am most desirous of correcting these errors, which appear to me likely to lead to much mischief.

2. I begin with

The Day and its Divisions.

Our knowledge on this subject is mainly derived from a Tablet in the British Museum, marked K. 15. A paper of mine was read before the Royal Irish Academy, in 1854, and was published in the twenty-third volume of the "Transactions," in which this Tablet was discussed. As that paper contained some slight philological errors, I will here repeat the substance of it, correcting those errors.

3. I now translate the inscription on the Tablet as follows, omitting the customary benedictory formula. "On the sixth day of the month *Nis'an*

(𒀭𒊩)* the day, (𒁹𒌋𒄀𒈬, *yumu*)†, and the night (𒌋𒄀𒈬 *musi*)‡ are equal (𒁹𒁹𒁹 𒌋𒌋𒌋𒁹𒁹 *mus'qulu*)§ ; six *kazabs* are the day ; six *kazabs* are the night."

* I gave the value *Nis'an* to this character in 1854, with a mark of doubt. I have since learned from Mr. NORRIS that among the bilingual Tablets in the British Museum there is one which gives the Assyrian names of the months. The present character, which appears to have been the initial of the Accadian (or old Chaldean) name, used by abbreviation for that name, is equivalent to the Assyrian *Nis'annu*. The other names of Assyrian months are, for the most part, the same—so far, at least, as respects the consonants—as the later Hebrew names, which there can be little doubt that the Jews learned at Babylon during the captivity. Those names of months which are used in books of the Bible written prior to the Captivity, namely, *Abib*, *Zif*, and *Bul*, are not found on the Tablet. The first of these is Egyptian, as I hope to prove in a future paper; the second is Sidonian, or Phœnician generally; and so, probably, is the third.

† Of the two characters here used, the former occurs by itself in the first clause of the inscription; and it is always so used when followed by an ordinal number. I believe it to be an Accadian word for "sun" or "day," and to have been read *tam*. In Assyrian writing it is joined with *mu* for the nominative, and *mi* for the genitive, and should be read *yu*. That this is *one* of the values of the character in question is proved by the name of the month *Tisri*, communicated to me by Mr. NORRIS, which consists of the present character preceded by *tas* and *ri*—evidently *Tasriyu*.

‡ In 1854 I thought that this was an Accadian word; but I have since found it with *su* and *sa* substituted for the last character, which is conclusive as to its being Assyrian; the Accadian language admitting no such changes. I now suppose that the root was משׁי, as the Arabic مسي ; and that its full forms were—n. *musiyu*, g. *musiyi*, a. *musiya*. The first of these might be contracted into *musu*, just as *Nabiyu* was contracted into *Nabu;* and, in like manner, the last might be contracted into *musa;* while *musi* might be used for any of the three cases. The Arabic *musy* signifies "evening;" and this was probably the primitive meaning of the Assyrian noun. In like manner the Egyptian *ruha*, and the French *soir*, which properly signify "evening," are occasionally used for "night." I think that the word signifies "evening" on the Khorsabad bulls (BOTTA, 42. 60), where we have *'urru musu akbud ;* which I take to mean, "in the early morning and in the late evening I laboured." *'Urru* is properly "the waking time" from ערר, = Heb. עור. On the Cylinder (RAWL. 36. 39) this clause reappears with a slight variation, but disguised by a blunder either of the Assyrian writer or of the copyist, who has substituted 𒁹𒁹𒁹 *zi* for 𒁹𒁹𒁹 *ra*. I read, "*'urra u musa akbud*, in the morning and in the evening I laboured." This is a complete sentence. The preceding clauses express the object for which he laboured; while what follows, to which there is nothing corresponding on the bulls, begins an entirely new sentence. I can by no means agree with Sir HENRY RAWLINSON, "Journal R. A. S." (New Series), vol. i., p. 208, who, after pointing out the mistranslations of the preceding passage made by M. OPPERT and Mr. TALBOT, makes, himself, almost as great a mistake as either of them, translating these words (*ursi u musakbud*, as he reads them,) "graciously and honourably."

§ *Mus'qulu*. This is the third person masculine plural of what I call the permansive present of

It is evident that this inscription records the observation of an equinox; and I will return to the consideration of it with that view. At present I will only remark that it points to a double division of the day, or *Nycthemeron;* viz., the first into the day properly so called, and the night; which were in this instance equal, though not generally so; the second into twelve equal *kazabs.*

4. I proceed to the second division of the day into twelve *kazabs.* Each of these was equivalent, putting out of sight errors of observation, to two hours of *mean solar time*, such as we use in ordinary life. The word *kazbu* is from the root כזב "to fail," which is applied to streams that run dry. This suggests the primary signification, "runnings out," namely, of the water which had been poured into a vessel with a small hole in the bottom. The Babylonians measured time by clepsydræ, which, when they had been filled, would be emptied in two hours of mean time. Such clepsydræ would maintain a sufficiently accurate division of the day into its twelve *kazabs* if the first were set to run at apparent noon, the second when the first had run out, and so on till the thirteenth, which would be set to run at the next apparent noon, whether the twelfth was just running out, or had already run out, or had still a little water in it.

5. The *kazab* is mentioned as an ordinary measure of time in more than one passage. The distance from the mainland to an island in the Persian Gulf is said to be a voyage of thirty *kazabs* (BOTTA, 41. 48) just as that from Cyprus to Syria is said to be one of seven days (BOTTA, 38. 41). Also, in RAWL., 42. 13, Sennacherib speaks of slaughtering his enemies for the space of a journey or march of two *kazabs.* This use of the word seems to me a positive proof that the clepsydra was in use among the Assyrians and Babylonians generally, and was not confined to the astronomers.

6. There does not appear to me any reason to suppose that a division of the day from sunrise to sunset into twelve hours, varying in length according to

the sixth conjugation, answering to the Hebrew *Hophal.* The root is שקל "to weigh." In this conjugation, when the first radical is a sibilant, in order to avoid the concourse of sibilants, *m* is substituted for *s* as a formative of the conjugation; regularly we should have *susqulu,* as *sursuda* (B. M. 33. 14). Literally, the word signifies, "are equipoised;" "*fiunt* (rather than *sunt*) *æquales.*"

the season of the year, and again of the night, from sunset to sunrise into twelve similar hours, was ever known to the Babylonians. Such a division was in use among the Egyptians, and was adopted from them by the Greeks, but the Babylonians and Assyrians knew nothing of it. I may here observe that some modern writers have committed a strange mistake in supposing the clepsydra to have been invented so late as the third century before Christ, and at Alexandria. These writers have confounded two totally different things; viz., the original invention of the clepsydra marking mean solar time, which goes back to remote antiquity, and is almost certainly due to the Babylonians, and the adaptation of the clepsydra to the *seasonable* (καιρικαὶ) hours of the Egyptians and Greeks, which was accomplished at the time and place which these writers mention. I have met with no subdivisions of the *kazab;* and I much doubt whether the Babylonians had any means of marking such.

7. I proceed to consider

The Month and its Divisions.

A chief source of information concerning the month is the Tablet in the British Museum, marked K. 90, which I described in "The Literary Gazette," of the 5th August, 1854. In this Tablet, as I interpreted it, the visible portion of the moon's illuminated surface on the different days of the month is stated. The surface is divided into 240 parts. None of it was visible on the 30th day; 5 parts were visible on the 1st and 29th, 10 on the 2nd and 28th, and so on, doubling or halving on each day the portion visible on the preceding. On the 5th and 25th days, 80 parts, or one-third of the surface, would be seen. The visible portion then increased by addition instead of multiplication, the common difference being sixteen parts. Thus, on the 6th and 24th days 96 parts would be visible; on the 7th and 23rd, 112, and so on till, on the fifteenth day, all the 240 parts were visible. This is by no means a correct estimate, but it is a tolerably good approximation. It proves, at any rate, that the Assyrio-Babylonian month was a lunar one; and that its first day was that when the moon was first visible. It was otherwise with the Egyptian lunar months, which began on the day of the conjunction of the sun and moon. With them the moon was first visible on the second day of the month, and the full moon was on the fifteenth or sixteenth. In fact, the systems of measuring

time in use among the Babylonians and the Egyptians had nothing whatever in common.

8. I will now mention a division of the month made by the Assyrians, which is, in a mythological point of view, of considerable interest, though it is chronologically unimportant. The entire month was presided over by S'in, the moon-god, to whom the number "thirty" is assigned in the Tablet, K. 150. See my paper "On the Assyrian Mythology," read 13th November, 1854, and published in the "Transactions of the Royal Irish Academy," vol. xxiii. I noticed in that paper, § 17, that 𒌋𒌋𒌋, which has the numerical value "thirty," is transcribed by 𒁹𒁹 𒌋𒌋𒌋𒁹𒁹, i. e. *s'i. in*, in the name *Pars'indu*, in different copies of the same inscription. See RAWL. 21. 69, 70, and the variants. The number "thirty" was appropriated to the moon-god, evidently in consequence of there being that number of days in a *complete* lunar month.

9. It is a natural inference from this that the goddess or goddesses to which the number "fifteen" was appropriated presided over the half month. In the paper last quoted, § 36, I observed that there were two goddesses "fifteen," mentioned in the inscriptions of Esarhaddon, one described as "of Nineveh," whom I identified with Istar, the other described as "of Arbela." In the ten years that have elapsed since the paper was written, I have attained to clearer views of the subject. I am now satisfied that 𒁹𒁹𒁍𒌋𒌋𒌋 and 𒁹𒁹𒁍𒌋𒌋𒌋 (which I regard as a calligraphic variant of the former character), should be read *'Istar* עַשְׁתָּר); and that there were two Istars, the Istar of Nineveh, and the Istar of Arbela, each of which presided over half the month.*

10. The two Istars were most opposite in their characters. The Istar of Nineveh presided over the first part of the month, when the moon was advancing to, and at length attained, her full magnitude. She was the goddess

* It is not a little remarkable that the two names *S'in* and *'Istar*, which the Assyrians gave to deities connected with the moon, are both named on a Himyaritic Tablet (No. 6 of the collection recently published by the Trustees of the British Museum). The Himyaritic characters represent سين and عشتر in Arabic, which can scarcely be mistaken. Curiously enough, however, *S'in* appears from this inscription to have been considered as a goddess, and *'Istar* as a god. I mention this without attempting to offer any explanation.

of procreation, birth, and good fortune, and was called κατ' ἐξοχὴν Istar; she was the consort of Assur. The other moon-goddess, who governed the last half of the month, when the moon was decaying, and at length became invisible, or apparently perished, was the goddess of evil fortune, decay, and death, and especially violent death. She was the consort of Bel, who presided over the last day of the month, when the moon was completely obscured (Tablet K. 170; see § 5 of last cited paper); and she was also celebrated as the blood-stained goddess of the battle field. In the inscriptions of Esarhaddon she is called the Istar of Arbela—a city which, as Sir HENRY RAWLINSON has shown in his paper above quoted, p. 195, was of a funereal character, and a place selected for the execution of great criminals.* In the earlier inscriptions she is called [illegible], which I read *Bi'lit qiti*, and suppose to signify "the lady of slaughter;" while her consort is called [illegible] *Bi'l qiti*, "the lord of slaughter."† I have very little doubt that *Bi'l Zarbi*, a name once met with in the inscription of NEBUCHADNEZZAR, published by GROTEFEND (col. ii. l. 48), signifying "the lord of blood," was the same as Bel; and I have no doubt at all that *Zarpanitu*, mentioned in the same inscription (col. 1, line 27), and spoken of in the Assyrian inscriptions as the consort of Bel, was the Istar of Arbela.

* Sir HENRY RAWLINSON has very properly corrected, in a note to this passage, a mistake in a translation furnished by me to Mr. LAYARD, in 1853, where Babylon is printed for Arbela. I did not see Mr. LAYARD's proofs; and I cannot tell with certainty, at this distance of time, whether the error was mine or the printer's: most probably, however, it was a *lapsus* of my own.

† In a note to the paper already cited, p. 201, Sir HENRY RAWLINSON assails this "bold hypothesis" of mine, as he is pleased to call it, with great vigour. Nevertheless, I adhere to it with as much confidence as ever; and I must acknowledge my inability to perceive the slightest force in any one of Sir Henry's objections. He writes as follows (note 31, in p. 201): "Now, a very slight acquaintance with the Proto-Chaldean language, to which all these divine names belong, is sufficient to show that [illegible] (pronounced *gé*, [illegible], see Syllabary, No. 366) is a mere grammatical suffix, used apparently like the terminal guttural in the Basque, and that [illegible] and [illegible], therefore, however they may have been pronounced in Assyrian, signify probably '*the* lord' and '*the* lady.'" To this it might almost be sufficient to reply, that the acquaintance with the Proto-Chaldean language of a person who could imagine any one of the propositions here stated or implied to be true must be "*slight*," indeed. It is not true that [illegible], *as a grammatical suffix*, was pronounced *gé*. It is not true that it was a *mere* grammatical

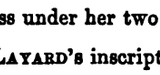
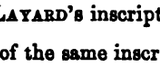
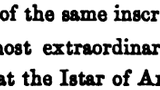
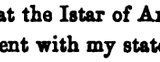
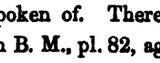
The name is elsewhere written *Zirbanitu.* The termination forms the feminine gender ; *an* is a suffix, equivalent to the Latin *os* in *form-osa*, as I stated in my paper of 1854, § 34. *Zarb* or *zirb* I take to signify " blood." The verbal root

suffix, the word " mere" evidently meaning *with little or no meaning.* Neither is it true that it was *always* a grammatical suffix, *and never a noun;* nor yet is it true that there is any uncertainty as to the Assyrian equivalent of the character when it signifies a noun. I will quote from Tablet K. 110 the passage from which Sir HENRY RAWLINSON has cited a few detached words. Whether Syllabary No. 366, which he quotes, is a duplicate of this, as I suspect, or no, it is manifest that it can possess no higher authority. The Tablet is, as usual, in three columns; and I find in consecutive lines:—

I suppose that no person doubts that the characters in the first and second lines of the middle column represent nouns, of which the corresponding lines in the first column contain the Accadian or Proto-Chaldean equivalents, and those in the third column the Assyrian equivalents in the nominative singular. *Bitu* and *babu* stand in Assyrian for " house" and " gate" in the nominative singular; while *t* and *ka* stand for the same in Proto-Chaldean; and I cannot see how any one can rationally doubt that in like manner in the third line stands for a noun of which *gî* (or rather *gi'* i. e. גִּי) is the Chaldean equivalent, and *kitu* or *qitu* the Assyrian in the nominative. In the genitive, after *bi'l* or *bi'lit*, this would become *qiti.* My reading this word so, and my translating it as a noun should not be termed a " bold hypothesis," for it is a " certain fact." The only point which is open for discussion is the meaning of the noun. Why Sir HENRY RAWLINSON quoted the readings of the first and second columns only, suppressing that of the third, is best known to himself. I believe *gi'* to be a form of the Chaldean noun only used in the late inscriptions of Assurbanapli. In the older inscriptions of the early Chaldean kings I should read *git.* There are frequent instances in which *t* is lost in an aspirate or breathing: *git* Ch.= *qit* Ass., is analogous to *gim* Ch. = *kima* Ass; *gina* Ch. = *kinu* Ass. The character had the Phonetic values *git*, *qit*, and *kit*, just as had the values *giv*, *qiv*, and *kiv*. I grant that in the Chaldean inscriptions was not always, nor in the majority of instances, a noun. It is often a postposition; and then it must be read *kit*, being a contraction for *ki-ta*, i. e. " place-in." The meaning after a word signifying a place is " in, within;" but after a word signifying a person, " with." Thus in RAWL., No. XV., col. 1, l. 15, *Ri-kit* means " with Ri." I will venture to say that in no one instance is , when not a noun, a definite article, or unmeaning suffix of any kind. It *invariably* signifies " in" or " with;" and if a person does not perceive that this is its meaning, that person

צרב is of common occurrence, signifying in the mutative parts of kal "to redden," its object being either *water* or *earth*, and the instrument "with blood" being constantly added. In the permansive parts of Kal, it should signify "to be red."*

does not know how to translate the passage where it occurs. And now, as to the meaning of the word *qitu*, I take it to be "slaughter," deriving it from the root נקר, whence we have *'usamqit*, "I slaughtered," and *musamqit*, "the slaughterer of." I may here observe that when נ as a first radical precedes ב, ג, or ק, it is regularly changed into מ; when it precedes ד or מ, it is retained; while before other letters it is assimilated to that which follows it, as in Hebrew. It is also liable to be dropped, as in the verbal noun *qit*. I connect this root etymologically with *cædo*, and also with *cado*. In fact, the forms above quoted are in the causative conjugation; but when the root occurs in kal, as *imqut* (RAWL., 23, 19), it signifies "he leaped or plunged." Exactly in the same manner the Egyptian verbal root *hai*, which generally signifies "to fall," is several times used for "to throw one's self." Thus in d'ORB., 11. 3, the meaning is obviously, "he caused him to throw himself." The Latin *cado* also, and the English "fall," are often used with a like active force.

Sir HENRY RAWLINSON has made other objections to my statements respecting the two Istars. He says ("Journal Royal Asiatic Society," vol. i., N. S., p. 194), "The inscription (RAWL.) pl. 8, No. 2, which especially commemorates the repairing of the building at Arbela, refers to the presiding goddess under her two names of  and  ; while the Nineveh goddess, in LAYARD's inscriptions, pl. 82, is named  and  (and in other copies of the same inscription  *in exact opposition to Dr. Hincks' theory.*" This last clause is a most extraordinary one, seeing that the facts alleged are *in perfect harmony with* my theory. That the Istar of Arbela should be called simply "the Istar" in *an Arbela inscription*, is quite consistent with my statement that the Istar of Nineveh was *usually* understood when "the Istar" was spoken of. There are exceptions to all general rules, and this is not one *arbitrarily* assumed. In B. M., pl. 82, again, it is not "the Nineveh goddess," as the words would naturally be understood, who is mentioned. She is not called "the Istar of Nineveh." It is the goddess of slaughter, the Istar of Arbela, to whom Assurbanapli dedicates a temple, in gratitude for her having enabled him to slaughter his Elymean enemies. She is called in the first instance *Bi'lit-qiti;* and when she is mentioned a second time, "the Istar" sufficiently designates her.

* In Hebrew צרב is interpreted *ussit*. It occurs, however, but three times in the Bible; and the meaning *rubefecit* will suit all the passages. It is applied to inflamed sores and scorched faces, where redness accompanies heat. In no instance does destruction appear to be implied. As in ארץ the צ passes into ע, whence the Latin *ara-*, and the Greek *ἀρο-*, may not the צ of the present root have undergone the same process, giving rise to *ἐρυθ-ρὸς* and *rub-er*, and previously to *eruber*, their common origin?

11. I now proceed to consider

The Year, and its Cyclical Multiples.

There being no trace of any but lunar months in the Assyrio-Babylonian inscriptions, it necessarily follows that their year was a lunar one; and this is established beyond all doubt by the Tablets. In those of the reign of Assur-ban-apli, who came to the throne in 677 B. C., a second Adar, or twelfth month, is here and there noted; and in the Tablet marked K. 160, mention is distinctly made of "the second Elul," or sixth month. This Tablet is of much the same date as the others; but it contains, as I interpret it, predictions respecting the disappearances and reappearances of the planet Venus, before and after her conjunctions; and these seem to be deduced from disappearances and reappearances which are recorded to have happened previously. These, of course, were copied from more ancient Tablets. It is in these records, which I refer to the reign of Tiglath Pileser, that the second Elul is mentioned. I infer from this that the intercalary month was in the time of Tiglath Pileser placed after Elul; but that between this and the reign of Assur-ban-apli it was removed to the end of the year.

12. It follows from this, that the years used by PTOLEMY, consisting of 365 days each, were never in use at Babylon. It has been hastily inferred by some writers that they were, from the fact of PTOLEMY reckoning them from the commencement of the reign of Nabonassar, a Babylonian monarch. The records of eclipses which were transmitted from Babylon to the Western astronomers were changed in the translation, so as to adapt them to Western usages. Knowing what we do of the style of the Babylonian inscriptions, we can easily restore the original. Thus the first of the Ptolemaic eclipses was recorded somewhat as follows in the document sent from Babylon:—"In the first year of Merodach Baladan, the moon was eclipsed on the 15th of Nisan. The eclipse began fully half a *kazab* after the moon rose, and was total."

13. I now come to consider the law by which the intercalation of months was regulated. There are four possible laws:—1st, The month may be intercalated so that the beginning of the year may always precede, or always follow, or always be nearest to, some phenomenon of the solar year; or, secondly, it may be regulated by a cycle of three years; or, thirdly, by a cycle of eight

years; or, fourthly, by a cycle of nineteen years. In the case of the Assyrio-Babylonian year, I will show that the first and second suppositions are absolutely inadmissible; and I will then show that the third is, on many accounts, much more probable than the fourth.

14. Our *data* are these:—In a certain year, which must have been in the reign of Assurbanapli, commencing in 667 B. C., the vernal equinox is recorded to have happened on the 6th of Nisan. In the year 720 B. C., two eclipses of the moon are recorded to have been observed on the 8th March, and 1st September, both of which were in the same Babylonian year, the second of Merodach Baladan. It follows that the year could not have commenced between these dates. At latest, therefore, it must have commenced on the 23rd February, and indeed it is obvious that it must have commenced on that very day; for it would be quite impossible, according to any conceivable law, for the beginning of the lunar year to have gained a whole month in addition to the twenty-eight days which it must have gained on this supposition, during little more than fifty-three years.

15. In the year 720 B. C., therefore, the year began on the 23rd February, thirty-three days before the equinox, which was on the 28th March; and subsequently, after an interval of about sixty years, it began five days before the equinox. It is obvious that in the first of these years the beginning was not at the new moon next before the equinox, nor at that nearest to it, while it was both in the latter of them. The first supposition is, therefore, inadmissible, and so also is the second; for the cycle of three years would constantly throw the beginning of the year further back from the equinox, and thus augment the difference, which needs to be diminished.

16. But though neither of these supposed laws could be that which was acted on in 720 B. C. and subsequently to it, it appears to me highly probable that both of them were acted upon in former times. I think it likely that from the earliest times down to about 800 B. C. the year began at the new moon which followed the vernal equinox; that some time about the date mentioned it was resolved, in order to prevent irregular intercalation, that every third year should have thirteen months. This would, in course of time, cause all the years to commence before the equinox, and some of them very considerably before it. When this evil was found to cause great inconvenience, a remedy was devised by which three years were intercalated in eight years instead of in

nine. This corrected, though very gradually, the evil that had arisen, the commencement of the year gaining three days on the equinox in every double cycle, that is, in sixteen years. I must admit that there is no proof of these successive changes, which I merely infer from *à priori* reasoning. There is, however, full proof that either the eight year cycle or the nineteen year cycle must have regulated the year between 720 and about 650 B. C.

17. The former is, indeed, much the more probable; for it would be strange indeed if the nineteen year cycle, which is so much more accurate than the other, should have been known to the Babylonians before 720 B. C., and yet not have been introduced into Greece till 432 B. C. There is, however, an arrangement of this cycle by which the dates of the commencement of the year in 720 can be reconciled with the Tablet in which the equinox is placed on the sixth day of the year. In 709 B. C. the year might have begun on the 23rd March, the equinox being on the 28th, five days after; and the same thing would happen fifty-seven years after, in 652 B. C., whch I take to be the date of the Tablet recording the equinox. This is, however, quite as consistent with the other hypothesis. Sixty-four years before 652 B. C., that is, in 716 B. C., the new moon which commenced the year would fall on the 11th March. Now, in sixty-four years there are four double cycles, in each of which the new moon advances three days in reference to the equinox. Consequently, the new moon would gain twelve days in all, and would fall on the 23rd March, as before.

18. There are, however, *data* to which I have not yet alluded, which appear to me to settle the question in favour of the Octoeteris. I have mentioned in § 11 a Tablet on which the dates of the disappearances and reappearances of Venus were noticed. Now, the very fact of such observations having been recorded is itself a presumption in favour of the Octoeteris having been in use. Five synodic revolutions of Venus and the earth round the sun are four days less than ninety-nine synodic revolutions of the moon and the sun round the earth; and eight solar years are intermediate between the two. It was natural that the Babylonians, with their scanty knowledge of astronomy, and their want of means of accurate observation, should assume the identity of all these products; more especially as the inequalities to which they were all subject would render it impossible for them to ascertain what their values really were.

19. If, however, I be right in my interpretation of this Tablet, as to which

I can scarcely entertain a doubt, the impossibility of the year being regulated by a nineteen year cycle is still more evident. In the year 747 B. C. the year should, according to my calculations from the recorded dates, have begun on the 22nd February; but this is ninety-five years, or five cycles of nineteen years, before the year 652 B. C., when the year began, not on that day, but on the 23rd March. This is conclusive, as it appears to me. On the other hand, the preceding year would, according to the recorded dates, have begun on the 4th March, and from this to the 23rd March is nineteen days, gained in ninety-six years, or six double cycles. The regular gain, at three days in a double cycle, would be eighteen days; but a difference of a day might easily be produced by the lunar inequalities. On the whole, I consider it as proved in a very satisfactory manner that the Babylonians regulated their years by an Octoeteris; and I will now, in conclusion, give the particulars of a double Octoeteris:—

Year B. C.	Year of Cycle.	First Day.	Regnal Year in Assyria.	Regnal Year in Babylonia.
726	1 E	March 2nd, .	1st Shalmaneser, ...	1st Yugæus.
725	2	March 20th, .	2nd „	2nd „
724	3	March 9th, .	3rd „ . . .	3rd „
723	4 E	February 26th,	4th „	4th „
722	5	March 17th, .	5th „	5th „
721	6	March 5th, .	1st Sargon, ...	1st Merodach Baladan.
720	7 E	February 23rd,	2nd „	2nd „
719	8	March 14th, .	3rd „	3rd „
718	1 E	March 4th, .	4th „ (Eponymy of Sargon)	4th „
717	2	March 21st, .	5th „	5th „
716	3	March 11th, .	6th „	6th „
715	4 E	February 27th,	7th „	7th „
714	5	March 18th,	8th „	8th „
713	6	March 6th, .	9th „	9th „
712	7 E	February 24th,	10th „	10th „
711	8	March 15th, .	11th „	11th „

The years marked E were embolismatic.

The royal eponymies were always in the first years of the cycle. The dates of the commencement of all other years may be found approximately by *adding* three days for every sixteen years *after* these, or *subtracting* three days for every sixteen years *before* these.

III.—*On the various Years and Months in Use among the Egyptians.* By the Rev. Edward Hincks, *D.D.*

Read 26th June, 1865.

1. It is now twenty-seven years since I wrote a paper on the years and cycles used by the ancient Egyptians, which was published in the eighteenth volume of the "Transactions of the Royal Irish Academy." At that time Egyptology was in its infancy. I accepted as an unquestionable truth a statement of Champollion's respecting the tetramenies of the Egyptian year, which is now considered by the great majority of Egyptologers to have been proved to be erroneous; and I drew conclusions which, though legitimately following from that statement, I have been compelled to renounce, as inconsistent with the true statement that has taken its place. I will begin the present paper with explaining the statement of Champollion and that which has superseded it.

2. Champollion thought that the first of the three tetramenies of the Egyptian year was that of *vegetation*, beginning when the waters of the inundation subsided, the second being that of *ingathering*, and the third that of *inundation*. He gave these three values to the characters which hieroglyphically denoted the tetramenies, supposing them to represent *water plants*, *a house*, and a *basin of water*, and to be used ideographically. In 1838, when I wrote, no one doubted that this was correct, and of course that a year which began about four months after the commencement of the inundation, or the summer solstice, which synchronized with it, was the normal year to which the names of the tetramenies were adapted. It was not till 1856, when Brugsch published his "Nouvelles Recherches sur la Division de l' Année des anciens Egyptiens," that the views of Champollion on this subject were called in question, and, in the judgment of most Egyptologers, completely disproved. According to Brugsch, the names of

the tetramenies were to be read phonetically. The first, *sha*, was *the inundation;* the second, *per*, was *the winter;* and the third, *shemou*, was *the summer*, or, rather, *the genial season.* I thought it due to M. BRUGSCH to examine his arguments and all that could be said against them with as much care as I could; and the result was, that I was completely satisfied that he was right; most other inquirers also came to a similar conclusion.

3. Now, as my paper of 1838 rested on CHAMPOLLION'S arrangement of the tetramenies as its foundation, it fell to the ground, as a matter of course, when that arrangement was overthrown. It was not in the early part of the eighteenth century before Christ that the months of the wandering year were in their normal position, but towards the end of the fourteenth, or the beginning of the thirteenth; and between that time and the appearance of the Phœnix recorded by TACITUS, no round number of years, such as 1800, could have elapsed. No number about 1300 has a cyclical character, or is a multiple of any that has. Again, I supposed that a year equivalent in its average length to the tropical year continued in use till 1767 B. C., when it was superseded by the wandering year. According to BRUGSCH'S discovery, however, it was not in 1767 B. C. that the wandering year would be in its normal position, but about 500 years later, or about 1000 years earlier. The latter would take us to 2767 B. C., which is not far different from the commencement of the Sothic cycle, 2920 years before that which CENSORINUS states to have begun 100 years before A. D. 238, the year when he wrote. If the cycle began in 139, as is generally supposed, the wandering year would thus have originated in 2782 B. C.; but if it began in 138, as I expect to be able to show that it did, the first wandering year would have begun on the 20th of July of the proleptic Augustan year 2783 B. C., a few days after the solstice and the commencement of the inundation.

4. All this is, however, on the supposition that the Egyptians had a Sothic cycle, such as CENSORINUS describes, and that the wandering year by which the Alexandrine astronomers dated the observations which they made was an Egyptian year. No one, I believe, entertained any doubt as to this being the case, till, in 1864, that same BRUGSCH, who corrected CHAMPOLLION'S mistake respecting the tetramenies, advanced the startling position that the Egyptians knew nothing of a wandering year; and that the civil year, by which they dated the events recorded on their monuments, was a fixed year, commencing at

the end of August, and coinciding with that Alexandrian year which is commonly supposed to have been introduced in memory of the capture of Alexandria by Cæsar Octavianus.

5. Such are the strange positions contained in the "Matériaux pour servir à la Reconstruction du Calendrier des anciens Egyptiens," published in 1864. I have examined this singular work with the same care as I did his "Nouvelles Recherches;" and, if I know myself, with the same openness to conviction; but the results of my two examinations have been totally different. While I felt myself constrained to submit to the arguments used by him in his work of 1856, I feel equally confident that those which he adduces in his last work are of no force whatever. With respect to the use of the wandering year, he has ignored many conclusive arguments that have been long known; and he has really been able to find nothing against it save one document, which he misquotes; the whole force of his argument lying in a number which is different in the original from what he gives in his text. Restore the genuine reading, and his argument fails. Again, he can bring forward no document earlier than the capture of Alexandria by Octavianus, in which the year can be proved to have begun at the end of August, save one which is of an age in which the wandering year would begin at that time. His book is not useless, because it contains some new and valuable *data;* but I have never met a book, the author of which shows such perverse ingenuity in drawing false conclusions from the documents which he brings forward.

6. The πρῶτον ψεῦδος of M. BRUGSCH in his recent work is, that the civil year of the Egyptians was not a wandering year of 365 days. My first business must, therefore, be to establish this fact; which I will do by a mass of testimony such as, I believe, can be produced in support of no other chronological fact. In the first place, it is undeniable that the Alexandrian astronomers dated by a year which had always 365 days, and the commencement of which, consequently, wandered through the seasons; the year beginning on the 20th of July in the four years, A. D. 136, 137, 138, and 139. We have dates of such a year not only in the records of the Babylonian inscriptions, but in records of observations made at Alexandria itself. We have, then, to choose between three alternatives:—Was this year of the Alexandrian astronomers introduced from Babylon? Was it invented by the astronomers? Or was it a year

already known to the Egyptians? Independently of direct testimony, the first two of these hypotheses are in a high degree improbable. The Babylonians appear from the cuneiform records to have known no other year than the lunar year, with intercalary months, restraining its commencement within certain narrow limits. It is certain, at least, that the Babylonian astronomers used such a lunar year; and it is not likely that the Alexandrian astronomers had any other Babylonian documents before them than those furnished by the Babylonian astronomers. Again, if the wandering year was the invention of the Alexandrian astronomers, what reason can be given for their making it commence on the 26th February, if they took for an era that of their astronomical tables; or in November or October, if they looked to their own times? And what could have induced them to give the names of the Egyptian months to those of their newly invented year, seeing that these were already appropriated to the months of two fixed years, according to M. BRUGSCH; one beginning in the latter end of August, and one on the 20th of July?

7. But let us hear what the Alexandrian astronomers say themselves of this wandering year that they used. How did they describe it, to distinguish it from the Athenian year, from that of the astronomer DIONYSIUS, and from that of the Alexandrians, dates of all of which are equated in their writings to that of the wandering year? I quote from YOUNG'S Astronomical and Nautical Collections, giving Dr. YOUNG'S references to his authorities. "TIMOCHARIS writes that he observed, in Alexandria, the 47th year of the first Calippic period of 76 years, on the 8th of Anthesterion, or the 29th of the *Egyptian* month Athyr" . . . .—HALMA'S "Ptolemy," vol. ii., p. 21. "In Dionysius's 13th year, the 25th of his month Ægon . . . the 20th, 21st of the *Egyptian* month Athyr."—HALMA, vol. ii., p. 226. The former of these equations places the 1st of Athyr on the 1st of January, B. C., 283, and the latter on the 29th of December, B. C. 273; and of course the 1st of Thoth on the 2nd of November, B. C. 284, and on the 30th of October, B. C. 273. M. BRUGSCH, however, will admit no Egyptian Thoth which does not begin on the 20th of July, or between the 24th and 30th of August.

8. The remaining example seems still more to the point. Dr. YOUNG quotes from THEON, "p. 284, 277, 281 B." (I give the reference as I find it), "An eclipse of the moon was observed by THEON the commentator $6\frac{1}{10}$ hours after noon of

the 6th Phamenoth." There can be no doubt that the day intended is the 25th of November, A. D. 364. From this it follows that the 1st of Thoth was in that year on the 24th of May. THEON says, also, that "this was the 81st year of Diocletian, *according to the Alexandrians*, in the month of Athyr, but *according to the Egyptians*, the 81st year in the month of Phamenoth." Here we have the wandering year, as used by the astronomers, described as that of the Egyptians, while the fixed year, beginning on the 29th August, which was gradually superseding it, is distinguished as that of the Alexandrians. Now, we find in several documents of the Roman period a date characterized as, "according to the ancients." Surely it is natural to suppose that this phrase is equivalent to "according to the Egyptians," in the passage from THEON just cited; and it was a most natural expression when the Alexandrian year was gradually coming into general use in Egypt. That those two phrases were equivalent M. BRUGSCH himself admits, "Matériaux," &c., p. 17; but he maintains that both refer to the Sothic year, which began on the 20th July. This, however, is most certainly not true of the expression as used by THEON.

9. It appears to me rather strange that M. BRUGSCH should labour to prove that the Egyptians had a fixed year, commencing at the rising of Sothis, or about the 20th July, as if this was denied by Egyptologers in general, or as if it were inconsistent with the existence of a wandering year. The received theory is, that the Egyptians had a fixed or Sothic year, and also a wandering year; and that they had a cycle which consisted of 1460 fixed years, and 1461 wandering years; the commencements of the two years coinciding for four consecutive years, about 2783 B. C., 1323 B. C., and 138 A. D. What M. BRUGSCH says in pages 18 and 19 may therefore be dismissed as perfectly irrelevant to the question under discussion. I will now make a few remarks on the Calendar of Esne, which will, I think prove that, in respect to the use of the phrase before us in it, he is completely in error.

10. In the calendar of Rameses III. at Medinet Habou (col. 12), the feast of the apparition of Sothis is fixed to the first of Thoth. From this it appears that this date, and of course all the dates in the calendar, are dates of the fixed or Sothic year. Among these dates there is one (col. 26) in which the setting up of the Tat (or Dudu, as M. BRUGSCH calls it) is fixed to the 30th Choiak. But in the calendar of Esne, of the Roman period, the setting up of the Tat is

assigned to the very same day. Surely it is a fair inference that the Esne calendar was arranged, like that of Medinet Habou, according to the fixed Sothic year, its first of Thoth coinciding with the 20th July of the Romans, or at any rate with the day of the Heliacal rising of Sirius, which occurred *about* the 20th. If this be so, the 9th of Thoth would be on or about the 28th July; but the calendar states that this was the beginning of the year "according to the ancients." This is quite in harmony with the views that I have already expressed. It was the first of Thoth of the ancient wandering year at the time when the calendar was engraved; and it would be so about 106 A.D. Now, as has been correctly remarked by BRUGSCH, there is no emperor's name connected with the calendar, or found in its vicinity. LEPSIUS assigns it to the reign of Claudius, but has given no reason for doing so. All that seems to be known is, that the hieroglyphics are, as CHAMPOLLION long since pointed out, in the very worst style, indicating a very late age.

11. According to M. BRUGSCH, the 9th of Thoth was the first day of the Sothic year, as he thinks that the dating "according to the ancients" was a dating according to that year. His reason for so thinking appears at first sight a very good one; but it breaks down on examination, resting on a false reading of the document on which he relies. He says (p. 17) that a papyrus of an astrological nature, preserved at Paris, is dated in the *tenth* year of Antoninus Cæsar, the lord, on the 8th of the month Hadrian, but according to the ancients the 18th Tybi. The month Hadrian is evidently the Choiak of the Alexandrian year; and the year "according to the ancients" must have begun, according to this document, forty days before the Alexandrian year began, that is, on the 20th July. Now the Sothic year did begin at this time, but the wandering year of the astronomers *did not;* for the tenth of Antoninus was A. D. 147; and in that year the wandering year began on the 18th July. At first sight, as I said, this seems a fair argument; but it rests on the erroneous statement of M. FRANZ, who has, in his "Corpus Inscriptionum," 4736, given L*ι* "the tenth year" in place of L*α* "the first year;" and in the first year of Antoninus the Sothic and the wandering years began on the same day, so that there is nothing in this document to neutralize the arguments already drawn from the Esne calendar, and from the words cited from THEON, in favour of the wandering year being that intended.

12. As so much depends on the correct reading of this date, I will give my reasons for rejecting M. FRANZ'S reading. In the volume of Hieroglyphics, edited by Dr. YOUNG, there is a fac-simile of this astrological document (Pl. 52, No. 2). The numeral letter denoting the year is made with two lines, a long one descending obliquely from left to right, and a short one, on the left of this, in almost a horizontal direction. A loop in place of this horizontal line is much more usual; but, as Antoninus did not reign twenty-three years, the letter could not have been λ, and there is no other which it at all resembles but α. Several letters in this papyrus are imperfectly formed: as τ and χ in the word τύχη, and the second α in ἀγαθ. Indeed, the omission of the final vowel in this word seems a defect of the same sort. M. FRANZ'S reading of ι seems to have originated in a notion that one of the lines of this combination must represent the horizontal line which distinguishes numerals. If so, however, the ι must either be written horizontally, which is evidently absurd, or sloping in the opposite direction to what it does elsewhere, when not vertical, as, e. g. in γένεσις in the first line. Besides M. FRANZ has no right to assume that a numeral letter would have a horizontal line over it after the sign L, which would sufficiently distinguish it as such.

13. To remove, however, all doubt on the subject, I inquired in what year the heavenly bodies would be in the positions indicated in this document; in A. D. 138, which is commonly reckoned to be the first of Antoninus, or in A. D. 147, his tenth. To my surprise, I found that the year indicated was neither of these two, but most certainly A. D. 137. The positions of the heavenly bodies which are given in this document are evidently obtained by calculation, and not by observation; the moon, for instance, and Saturn being below the horizon at the time of the native's birth. We may therefore expect an error of one or two degrees in the positions, as compared with those obtained from modern tables; but an error of much greater amount is not to be thought of. Now, in the first place, the sun's place is said to be in 13° 23′ of Sagittarius. This points to some day soon after the beginning of December, but gives no information as to the year. Saturn is said to be in 3° 8′ of Aquarius, being retrograde. According to LALANDE'S Tables, he was in this position in the early part of December, A. D. 137. His advance in the heavens is above twelve degrees annually, heliocentrically; and his geocentric place can never be very

far from his heliocentric place. It is not likely, therefore, that the position in the papyrus could refer to A. D. 138; and it is quite certain that it could not refer to A. D. 147, when Saturn would be more than 120° from the place indicated. Let us now look to the moon. She is said to be in 3° 6′ of Aquarius (almost exactly in conjunction with Saturn), and there she was on the morning of the 4th December, A. D. 137; that is, in astronomical language, on 3rd December, 19 or 20 hours P. M.; but in A. D. 138 the moon was at that time of the month far away from Saturn and from the sign Aquarius. That the year intended was A. D. 137, does not, indeed, admit of the slightest doubt.

14. Now let us consider what follows from this. In the first place, the 8th of Choiak being the 4th December, the 1st of Thoth must have been the 29th August. This is in perfect agreement with what we know of the Alexandrian year. "According to the ancients," however, it was the 18th of Tybi, which coincided with the 4th December. This would give 20th July, A. D. 137, as the 1st of Thoth of the *ancient* year, and this was certainly the first day of the wandering year used by THEON, and attributed by him to the Egyptians. M. BRUGSCH assumes, as if it had never been questioned, that the 20th July, A. D. 137, was the first day of the Sothic year. According to LEPSIUS, however, the first of Thoth of that year was the 19th July. I will bring forward new evidence on this matter after a while. At present I will only say that, if BRUGSCH be right, the two years, Sothic and wandering, would coincide as to their commencement in A. D. 137, the year in which the document is dated; and nothing can, therefore, be inferred from it against the received opinion that "the year of the ancients" was the wandering year of THEON, PTOLEMY, and the other astronomers.

15. But we may draw a farther inference from the fact that has been established. If the 4th December, A. D. 137, was in the first of Antoninus,—and, by the way, PTOLEMY in his canon makes it so too,—Hadrian must have died on the 10th July, A. D. 137, not A. D. 138, as is commonly thought; and the Consulship of Antoninus Augustus II. and Bruttius Præsens, which immediately followed that in which Hadrian died, must have coincided with A. D. 138, not A. D. 139. But it was on the 20th July in this consulate that the Sothic cycle was renewed according to CENSORINUS; and this, he says, was one hundred years before the year in which he wrote, which, from many statements

that he makes respecting it, was, beyond all question, A. D. 238. The newly proved fact that Antoninus and Præsens were consuls in A.D. 138, removes a difficulty which has been often felt. We may, then, confidently place the commencements of the three cycles on the 20th July, B. C. 2783, B. C. 1323, and A. D. 138, a year earlier than the dates that have been hitherto received.

16. An objection, however, will at once suggest itself to most attentive readers. It is quite certain that the death of Nero and the accession of Vespasian occurred in those years to which they are assigned by the received chronology. M. von Gumpach has, in the second paper at the end of his "Hülfsbuch," placed it beyond all doubt that Nero was killed on 9th or 10th June, A. D. 68, and that Vespasian was proclaimed emperor on the 1st July, A. D. 69. It is certain that A. D. 70 was the year in which Vespasian II. and Titus were consuls. It is certain, also, from the testimony of Censorinus, that Ulpius and Pontianus were consuls in A. D. 238, the year when he wrote. The *fasti*, as generally received, agree with these dates; but they place the consulship of Antoninus II. and Præsens in A. D. 139. If, therefore, the conclusion at which I have arrived be correct, a spurious consulate must appear in the *fasti* somewhere between A. D. 70 and A. D. 138, and a consulate must have been omitted between A. D. 139 and A. D. 238. I admit that this legitimately follows; and I will endeavour to show where the two errors were most probably committed. I do not, however, pretend to have before me all the evidence from inscriptions and medals which may be in existence; and I therefore submit what follows to the better judgment of others, who may perhaps be able to correct the errors which must exist in the received *fasti* in some better manner than what I propose.

17. First, then, I think that the consulate of L. Ceionius Commodus Verus and C. Cornelius Priscus, interposed between the last two consulates of Vespasian and Titus, ought to be erased from the *fasti*. Cassiodorus, Idatius, Victorius, and the Sicilian Chronicle are all agreed that the penultimate consulship of Vespasian and Titus *immediately* preceded the last, on the 23rd of June in which Vespasian died. If they be right in this, we should have

A. D. 77, Imp. Cæs. Vespasianus VIII., T. Cæs. Vespasianus VI.
A. D. 78, Imp. Cæs. Vespasianus IX., T. Cæs. Vespasianus VII.

Commodus Verus and Cornelius (or rather D. Novius) Priscus could only

have been *suffecti;* and were probably so in A. D. 77. This reduces the reign of Vespasian, reckoned from his assumption of the empire, to 8 years 11 months, and 22 days, a year less than is commonly reckoned. I observe, however, that PTOLEMY in his canon allows only ten years to Vespasian, while he reckons into his reign the three short reigns of his predecessors. He makes the year which began A. D. 68, Aug. 6, to be the first of Vespasian, and that which began A. D. 78, Aug. 4, to be the first of Titus. He makes Titus reign three years, there having been three firsts of Thoth in his reign; for he lived till the 13th September, A. D. 80, the 42nd day of PTOLEMY'S wandering year. With this testimony of PTOLEMY as to the date of Vespasian's death two authorities at least agree, EUTROPIUS and the Sicilian Chronicle. CLEMENS ALEXANDRINUS also appears to have assigned him a reign of 8 years 11 months and 22 days. The MSS. have 11 years, for which commentators would substitute 9; but no confusion between *θ* and *ια* could possibly have existed, whereas *η* is often written in such a manner as to resemble *ια*, the *α* being formed as in the astrological papyrus (§ 12). It must be admitted that other ancient authorities give him a longer reign; but there was a great source of confusion in the circumstance that his reign was counted from different epochs:—1st, the death of Nero, of whom he might almost be considered the successor in the East, though an interregnum of above a year elapsed before he assumed the purple—this happened 10th June, A. D. 68; 2ndly, his assumption of the empire on 1st July, A. D. 69; and, 3rdly, the death of Vitellius, 6th December, A. D. 69, when he was left without a competitor. Another argument in favour of the opinion that Vespasian died in A. D. 78 I deduce from his age as stated by SUETONIUS. He was born on the 17th November in the consulate of Camerinus and Sabinus; that is, as all are agreed, in A. D. 9. If he died in A. D. 79, as is commonly thought, he would have lived 69 years and 7 or 8 months; but SUETONIUS speaks of his being in his 69th year when he died, "annum gerens ætatis sexagesimum ac nonum." I take it that he was in his 69th year from his completing his 68th, which he did in November, A. D. 77, to his completing his 69th, which he would have done in November, A. D. 78.

18. With less confidence I think that the omitted consulship, to be inserted in the *fasti*, was that of Annianus and Maximus in A. D. 226. This is inserted by CASSIODORUS and VICTORIUS immediately before that of Albinus

and Maximus, and it might easily have dropped out from the similarity of the names. I am aware that there is more than one *primâ facie* objection to this hypothesis; but none of the objections that I am aware of appears to me conclusive. I think that the insertion of a consulship cannot be made before A. D. 192; because I think that the testimony of CLEMENS, to be presently considered, proves that Commodus was killed at the end of A. D. 191; not, as is commonly thought, of A. D. 192. I think also that the contemporary evidence of DION forbids us to make any change in the lengths of the reigns of Septimius Severus and his son. It is just possible that Maximinus, whose coins prove that he was twice consul, and whose name is expressly stated to have been erased from the *fasti* by his successor, may have reigned a year longer than is commonly supposed. I, however, much prefer the opinion previously expressed; and I think that the fact of Alexander having come to the throne in the spring of A. D. 221 is by no means inconsistent with the fact of A. D. 222 having been reckoned as his first year by HIPPOLYTUS.

19. I have now considered the astronomical testimony, including that of the MS. of which M. BRUGSCH has given an incorrect copy. In my judgment no rational doubt can exist that the Alexandrian astronomers dated by a year of 365 days, such as all Egyptologers prior to M. BRUGSCH supposed to have been the Egyptian civil year; and that these astronomers, when they thus dated, spoke of doing so according to the *Egyptian*, or according to the *ancient* mode; the latter term "ancient" being only used when this mode of dating had to be distinguished from that of the Alexandrians in the Roman period.

20. To this testimony of the astronomers I add that of the distinguished chronologer CENSORINUS, who distinctly affirms ("de die natali," c. 21), that in the year when he wrote (A. D. 238), the 1st of Thoth coincided with the 7th of the kalends of July (25th June), and that 100 years before, it coincided with the 12th of the kalends of August. We must read xiii. in place of xii., which would denote the 20th July, 25 days, not 24, after the day in the year when he wrote; for CENSORINUS had previously stated (c. 18) that the civil year of the Egyptians consisted of 365 days only, without any intercalation; but the Romans would intercalate 25 days in the 100 years. So far as respects the date of the 1st of Thoth in A. D. 238, CENSORINUS is in perfect agreement with the astronomers.

21. I now proceed to consider the testimony of S. CLEMENS ALEXANDRINUS, who, while he would naturally use dates of the Alexandrian year in what he said of himself, cites the testimony of other Egyptians, who dated by the wandering year. The consequence of this has been, that he has been misunderstood by his copyists and editors, and that his text has been corrupted. In its present state we cannot venture to bring forward his testimony, as independent of that of others; but we may show that on the supposition that his year was that of the astronomers, or (as I contend) the old civil year of the Egyptians, his numbers can, by introducing a few natural corrections, be made to give a consistent testimony, pointing out the true dates of our blessed Lord's Nativity and Crucifixion.

22. S. CLEMENS says, in a well-known passage of the first book of "Stromates," that some placed the Passion on the 25th Phamenoth, others on the 25th Pharmuthi, and others on the 19th Pharmuthi. One of these three is, in all probability, a genuine tradition, of which the other two are corruptions; and, if so, the second must be the genuine tradition, since it agrees as to the month with the third, and as to the day of the month with the first; while the first and third differ from each other, both as to the month and as to the day. Now, if we inquire in what year the 25th of Pharmuthi fell on a Friday in the wandering year, we find that it did so in A. D. 30, when it corresponded to the 7th April. According to the best modern authorities, this is the correct date of the Crucifixion. Mr. GRESWELL, under the false impression that in that year the 14th Nisan fell on the 6th of April, has laboured hard to show that in consequence of some interruption in the Calendar this was not Thursday, but Friday. Canon BROWNE has shown, in his "Ordo Sæclorum," that the supposition of an interruption of the Calendar, by which the 6th of April would be on a Friday, is inadmissible, and he therefore places the Crucifixion in a different year. Both these gentlemen, however, have failed to see that the 7th, and not the 6th of April, was the real 14th of Nisan. The first day of Nisan was the first day when the moon was visible. It could not have been so till the evening of the 24th March according to our reckoning; for the conjunction of the luminaries was between 8 and 9 o'clock on the evening of the 22nd; and on the following evening, being only about ten degrees past the sun, the moon could not have been seen. If, then, the 1st of Nisan began on the evening

of the 24th of March, the 14th must have begun on the evening of the 6th of April, or, in other words, must have coincided with the Friday, or Preparation, which began on that evening, and ended on the evening of the 7th. I am happy to be able to quote the Bishop of Gloucester and Bristol as advocating this conclusion, at which I had myself arrived many years ago. See "Historical Lectures on the Life of our Lord," p. 323, n. In this admirable work the Bishop has given a more uniformly correct chronology of our blessed Lord's life than is elsewhere to be met with; and with this agrees, as to the date of the Crucifixion, the Egyptian testimony cited by S. CLEMENS.

23. S. CLEMENS further says, that from the Crucifixion to the destruction of Jerusalem are 42 years and 3 months; and from the destruction of Jerusalem to the death of Commodus, 128 years 10 months and 3 days. Now, I think every one must admit that there is here some great corruption of the text. Indeed, I think that it will be generally admitted that there is a complication of blunders; some of them, as generally happens, due to accident, and others to unskilful correction. The latter, I believe, in this instance, both followed and preceded accidental mistakes. I believe that what S. CLEMENS really wrote was as follows:—*Ἀφ' οὗ δὲ ἔπαθεν ἕως τῆς καταστροφῆς Ἱερουσαλὴμ γίνονται ἔτη* M *μῆνες* E *ἡμέραι* Γ, *καὶ ἀπὸ τῆς καταστροφῆς Ἱερουσαλὴμ ἕως Κομόδου τελευτῆς ἔτη* PKA *μῆνες* E [*Γίνονται οὖν ἀφ' οὗ ἔπαθεν ἕως Κομόδου τελευτῆς ἔτη* PΞA] *μῆνες* I *ἡμέραι* Γ. In the original text the words *ἔτη*, *μῆνες*, and *ἡμέραι*, were probably omitted, the numeral letters standing alone. The dates of the three events would be, according to this reading, when referred to the epoch of Augustus and the wandering year,

A. Aug. 59, Pharmuthi, 25 = A. D. 30, April 7.
„ 100, Thoth, 28 = „ 70, September 2.
„ 221, Mechir, 28 = „ 191, December 31st.

That Commodus died on the 31st December is admitted by all; but this coincided with the 28th Mechir, the date indicated by these numbers, in the years A. D. 188–191. It is to this that I referred in § 18. According to JOSEPHUS, Jerusalem was taken on the 8th Gorpiæus, or Elul, and this is commonly reckoned as the 1st September. A mistake of a day might easily have been

made by those who reduced the Jewish to the Egyptian date; or the moon might not have been seen till the 26th August, in which case the true date of the capture would be the 2nd of September.

24. I now proceed to consider the mistakes by which the true text as above given was corrupted into that which we read in the editions of S. CLEMENS. In the first place, B was substituted for the former of the E's by an accidental mistake, arising from the similarity of the letters; secondly, as 2 + 5 were not equal to 10, H, eight, was substituted by a corrector for the latter E, five; thirdly, through accident, or through some very stupid mistake of a corrector, the A was omitted in the second interval. The partial intervals had now become M B Γ and PK H; and the total remained PΞA I Γ. The remaining mistakes are of an obvious character. The passage which I have placed in brackets dropped from the text, and the numeral letters were improperly joined together, giving two intervals in place of three, namely, MB Γ and PKH I Γ.

25. The date of the wandering year when Commodus was killed, viz., 28th Mechir, is confirmed by another statement of the same author. He gives 194 years 1 month and 13 days from the birth of Christ to the death of Commodus. This last was A. Aug. 221, Mechir 28; which gives for the birth of Christ A. Aug. 27, Tybi 15, or B. C. 3, January 5. Now, S. CLEMENS mentions 15th Tybi as one of the dates traditionally current for the baptism of Christ; and he says that some persons celebrated his birth and his baptism on the same day. So far as the years are concerned, this accords perfectly with the views of the Bishop of Gloucester, leaving 32 Julian years and 92 days, or 32 Egyptian wandering years and 100 days, between our Lord's birth and crucifixion. If we prefer reading 196 for 194, which some will probably do, though I do not, the birth will be thrown back to B. C. 5, January 6th, which would bring the Nativity to that day of the Julian year on which the baptism has been usually placed. I will not discuss this matter further. If the interpretation which I have proposed commends itself to any one, it will be to him an additional argument in favour of my views respecting the Egyptian civil year, as opposed to those of M. BRUGSCH. If otherwise, however, let it be carefully observed, that M. BRUGSCH's views obtain no confirmation from what is said by S. CLEMENS. No possible interpretation of these words can reconcile what he says

to a reckoning by the Alexandrian year. He either recognised the civil year of 365 days without intercalation, or he wrote a tissue of absurdities ; and on the former hypothesis, which is *à priori* much the more probable, he fixes the dates of the Nativity and Crucifixion in conformity with the results of modern criticism, as best expounded by the Bishop of Gloucester and Bristol.

26. I now pass to the evidence of the Rosetta Stone. This is dated on the 18th of Mechir in the 9th year of Epiphanes, which, if not in B. C. 196, cannot be far distant from that date. According to M. BRUGSCH, the Egyptians had no other year than what began on the 20th July, and what might be as early as the 25th August, and as late as the 29th. According to him, therefore, the Rosetta Stone was dated either on the 3rd January, or the 8th–12th of February. It is, however, equated on the Rosetta Stone to the 4th of Xanthicus. Let us see how this will accord with M. BRUGSCH's dates, and how with the date by the wandering year, which in B. C. 197 began on the 11th of October, giving for 18th Mechir B. C. 196, March 27th. Now, the Egyptians used during the Ptolemaic period two sorts of Macedonian years—first a lunar one, and subsequently a solar one. The lunar Xanthicus was the same as the Hebrew Nisan, according to JOSEPHUS, who makes it the month of the Passover; and some have thought that this was the month intended, the 24th March, B. C. 196, having been the 1st of Xanthicus. In that year, however, the moon must have been visible on the 22nd, and it can scarcely be supposed that, when the Calippic periods were in use, the Greeks in Egypt could have used a lunar year which would admit such an error as this. It is probable, therefore, that it was the 4th of the solar Xanthicus, with which the 18th Meehir coincided. According to Archbishop USSHER in his treatise, " De Macedonum et Asianorum Anno Solari" (pp. 46, 47, ed. 1648), the month Xanthicus began in bissextile years on the 24th March, in other years on the 25th, and this he proves to be the case by a series of double dates, beginning with A. D. 67. Now, the year B. C. 197 was proleptically bissextile ; in it, therefore, the 27th March was the 4th Xanthicus, and it was also the 18th Meehir of the wandering year. In the three years next before this, the 4th Xanthicus would also have coincided with the 18th Meehir of the wandering year ; both dates corresponding to the proleptic 28th of March ; but these years are too early for the 9th Epiphanes, which must, therefore, have included, the 27th of March,

B. C. 197, the true date of the Rosetta Stone, as I pointed out in 1842, in a paper in vol. xix. of the "Transactions of the Royal Irish Academy." I need scarcely say that none of M. BRUGSCH's possible Egyptian dates of the stone can be made to coincide with the Greek date by any legitimate process.

27. I will now go back to a much earlier period, and will prove that the Turin Book of Kings, which dates from the eighteenth or possibly the seventeenth dynasty, recognises the wandering year as in use when it was composed. I assign this date to the Turin Book of Kings, because, while it contains Hykshos names, as M. DEVERIA has recently proved, it contains no names of the eighteenth dynasty, nor even of the seventeenth, to which I refer Kames and Taanaken. The name of Rameses II. is found on the reverse of the papyrus in connexion with accounts; and it seems to me by no means probable that the back of such a document as this should be scribbled upon until it was considered old, and a copy had perhaps been taken. Is it too much to hope that such a copy may yet be found, in such a state of preservation as to clear up the difficulties which yet remain in respect to early Egyptian chronology—perhaps, too, continued to the nineteenth dynasty, so as to be parallel to the latter portions of the invaluable Tablets of Abydos and Saccara?

28. As what I have to bring forward from the Turin papyrus in proof of the existence of the wandering year is of the very highest importance, both in itself and in the conclusions to which it leads, I will discuss it in all its bearings, so as, I trust, to convince every Egyptologer of the rectitude of my views. I must begin with establishing two positions, which I have maintained for several years, and which I shall have to use in the course of my proofs. The first is, that all the native Egyptian kings counted the years of their reigns from their respective accessions, just as our English sovereigns do; and not, as PTOLEMY counted the reigns of the kings in his canon, from the commencement of the civil year, nor from the commencement of any other sort of year. This position was laid dawn by M. DE ROUGE in 1860 ("Inscription de Karnac," p. 27). To the proofs of it which he has given in this memoir, I would add that derived from the inscription on the obelisk of Karnac. The preparation of this obelisk is said to have begun on the first Mechir in the fifteenth year of Hatasu, and to have been completed in Mesore in her sixteenth year, occupying *seven* months. In this inscription we must by no means substitute 15th for

16th, nor *vice versâ;* nor yet nineteen for seven, as some writers have not scrupled to do. We must take the text as it stands, making the sixteenth year of Hatasu to have begun between the first of Mechir and the end of Mesore.

29. My second position is, that the regnal years of the native Egyptian kings consisted of twelve months, or 360 days *only;* so that the commencement of each regnal year after the first was on a day of the civil year five days before the commencement of the preceding regnal year, and so that 73 regnal years would be equal to 72 civil years. I was first led to this conclusion by finding, as the result of a critical restoration of MANETHO, that he counted the length of the 26th dynasty as 157 years, while the sum of the respective reigns was 159 years. The sum of the years in the dynasty was obtained by reducing the regnal years to civil years. Precisely in the same manner, the duration of the dominion of the Shepherds in Egypt is given by MANETHO as 518 years, by JOSEPHUS as 511. The latter number of civil years is equal to the former number of regnal years. It would certainly be desirable to confirm this conclusion by showing, from dated monuments, that different regnal years of the same king began on different days of the civil year. I have thought that such a confirmation was afforded by comparison of the inscriptions in LEPSIUS' "Denkmäler," Abth. iii. Bl. 31 b., l. 13, and Bl. 32, l. 13. If the dates in these two lines be correctly read 2nd and 22nd of Pachon, or 1st and 21st Pachon, they would give the dates of the commencements of the 23rd and 19th years of Thothmes III., the latter being the first year of his actual reign after the deposition of Hatasu. As, however, authors differ as to the correct reading in both places, I have been very well pleased to obtain from a comparison of some inscriptions of Rameses II. what seems to me a convincing proof that the commencements of his regnal years were not on the same day of the civil year, but travelled backwards through it, though the inscriptions do not decide at what rate.

30. The inscriptions to which I refer are those which record the cyclical panegyries, of which ten appear to have been celebrated in thirty years. They are alluded to on the Rosetta Stone, and in the inscriptions of Pepi of the sixth dynasty. The chief of these panegyries was the first of the series, called Set. As it appears from the inscriptions of Pepi that the panegyries were celebrated on different days at different places, I will confine myself to the inscriptions of

Rameses II. at Silsilis, which are the most numerous, and apparently the best preserved. In Plate LXXXII. of BRUGSCH's "Recueil," No. 5, Rameses is said to have celebrated the Set for the first time in his 30th year through the whole of Egypt. In Plate LXXXIII., No. 1, the 1st, 2nd, 3rd, and 4th panegyries are said to have been in his 30th, 34th, 37th, and 40th years. These four dates are repeated on a second slab; and in No. 2 of the same Plate, the sixth panegyry is said to have been celebrated on the first of Tybi in the 4(6)th year of Rameses. So I restore the number in accordance with the other inscription, which gives an interval of three years between every two panegyries after the first and second. There are on the stone four vertical bars remaining, two above the other two, followed by a defect in the stone, which we may with equal propriety suppose to have contained two additional bars, one, or none at all, giving the three admissible readings, 46th, 45th, and 44th. I choose the first; and explain the series by supposing that all the panegyries at Silsilis were celebrated on the 1st Tybi, at intervals of 3 civil (or perhaps Sothic) years; that in the 30th year of the king the 1st Tybi was a few days before its close, whereas the 1st Tybi three years after this was a few days after the commencement of the 34th regnal year.

31. Whether what I have said in support of these two positions be considered as amounting to a demonstration or no, it will, I think, be conceded that the positions are rendered highly probable; and that any further evidence in support of the regnal year being one of 360 days ought to be carefully weighed. Now, within the last year, evidence of a most unexpected character has been noticed by me, connecting the supposed regnal year of 360 days with the supposed civil year of 365 days, in a document which I have already mentioned;—the Turin Book of Kings, which goes back to the origin of the new kingdom. In the pamphlet which accompanied Sir GARDNER WILKINSON's edition of the Book of Kings, published in 1851, I noticed in p. 55 the statements in fragment 1 that there were 330 kings,—the very number which HERODOTUS mentioned; and that their reigns amounted to 19 periods 11 years 4 months and 20 (or upwards) days. Whether there were any units after the 20 is not indicated in the MS. In the following line I read—"The 19 periods are 2280 years," giving for the length of a period 120 years. It never occurred to me to

doubt that these years (the 120 and the 2291) were civil years of 365 days, until last year. It then flashed upon my mind that they were regnal years of 360 days each; and I began to consider how many civil years would be equal to these 2291 regnal years. On making the calculation, I found that 2291 regnal years 4 months and 20 days were *precisely* equal to 2260 civil years!

32. But this was not the only coincidence that struck me. Previously to this, I had determined, by a critical examination of the different copies of MANETHO that the 18th dynasty began to reign, according to his original statement, in 1531 B.C.; and assuming with LEPSIUS that the 3556th year of Menes, being the first year after the conquest of Egypt by Ochus, began on 16th November, 340 B. C., the first year of the 18th dynasty, as determined by me, would begin on the 10th September, 1531 B. C., and would be the 2364th year of Menes. Now, both the Old Chronicle and EUSEBIUS make the duration of the 17th dynasty 103 years; and thus the first year of the 17th dynasty would be the 2261st of Menes, the *identical* year given by the Turin papyrus, as above interpreted! I have in § 27 given reasons for thinking that the Turin book of kings included all those previous to the 17th dynasty, and none of that dynasty.

33. As this paper may fall into the hands of persons who have not seen my papers in the "Journal of Sacred Literature," in which I trace back the readings in the present copies of MANETHO to the original from which they were corrupted; I will now give what I conceive to be the original reading of MANETHO, and will deduce from it the several corrupt readings which have successively superseded it; thus adopting the synthetic in place of the analytic method, and explaining as I go along the causes of the several corruptions. So far as respects the dynasties (which only, and not the several reigns, I will now discuss), the dates of their accessions and their durations were stated by me in January, 1863 ("Journal of Sacred Literature," vol. ii., p. 479), to have been as follows—I give the dates in years of the New Kingdom, which must be understood to be civil years of 365 days, and I add the date before Christ at which the civil year commenced.

A.

	N. K.	Began.	Lasted years.
18th dynasty to the death of Amenophis, . . .	1,	10th Sept., 1531,	162
Later reigns thereof, . .	163,	31st July, 1369,	45
19th dynasty, ...	208,	20th July, 1324,	149
20th dynasty, ...	357,	13th June, 1175,	178
21st dynasty, ...	431,	25th May, 1101,	121
22nd dynasty, ...	552,	25th April, 980,	202
23rd dynasty, ...	754,	6th Mar. 778,	89
24th dynasty, ...	761,	4th Mar. 771,	44
		Sum up to this, . .	990
25th dynasty, ...	805,	21st Feb., 727,	44
26th dynasty, ...	849,	10th Feb., 683,	157
27th dynasty, ...	1006,	2nd Jan., 526,	„

This was MANETHO's genuine statement, on which I will observe, that I believe it to be quite correct up to the Ethiopian conquest, the summation preceding which has been preserved by AFRICANUS. After the Ethiopian conquest 65 + 136 would have been a better division than 44 + 157, but the sum is correct. The New Kingdom lasted, according to MANETHO, 804 civil years to the Ethiopian conquest, 201 from that to the first Persian conquest, and 187 from that to the final Persian conquest:—in all, 1192 years, which with 2363 for the first seventeen dynasties (see § 32) makes up the 3555 years, which SYNCELLUS gives as MANETHO's own summation of the durations of the several dynasties.

34. I now proceed to consider the several corruptions of this genuine document. The first, which I will call B., throws back the rise of the 18th dynasty 186 years, or to – 185, beginning 26th October, 1717. The mistake arose in this manner:—MANETHO gave 990 for the sum of the actual durations of the several dynasties. Two of these dynasties, however, were overlapped by those which followed them. The 20th reigned 74 years before the rise of the 21st, and 104 years more as contemporary with it. The 23rd reigned only 7 years before

the rise of the 24th, and continued 82 years after that event, till the accession of Tirhakah to the crown of Egypt, 16 years after he became King of Ethiopia. Now, the author of this corruption—counting the durations of the 20th and 23rd dynasties as 74 and 7, in place of 178 and 89, and observing that this made the seven dynasties last only 804 years, which was indeed the entire interval during which they reigned; while MANETHO gave the sum of their durations as 990 years—added the 186 years of overlapping, which MANETHO had counted twice over, to the first part of the 18th dynasty, which he thus made to last 348 years. As the latter part of the 18th dynasty was sometimes counted into the 19th, this made the 18th and 19th either 348 + 194, or 393 + 149. The former division was adopted by EUSEBIUS and the Old Chronicle, the latter by JOSEPHUS and AFRICANUS. We have thus:—

B.

	N. K.	Began.		Lasted years.
18th dynasty, former part, –	185,	26th October,	1717,	348
18th dynasty, latter part,	163,	31st July,	1369,	45
19th dynasty, ...	208,	20th July,	1324,	149
20th dynasty, ...	357,	13th June,	1175,	74 or 178
21st dynasty, ...	431,	25th May,	1101,	121
22nd dynasty, ...	552,	25th April,	980,	202
23rd dynasty, ...	754,	6th March,	778,	7 or 89
24th dynasty, ...	761,	4th March,	771,	44
				990

As to the following dynasties B. does not differ from A.

35. From B. were derived two corrupt lists, which may be called C. and D. In one of these the 20th dynasty was allowed 178 years; but the 104 years which were struck off in B., and which in reality overlapped the 21st dynasty, were taken from the 22nd dynasty, which was thus reduced to 98 years. In like manner, in the other list, the 23rd dynasty was made to last 89 years; and the 82 years of overlapping, being subtracted from the 202 of the 22nd, reduced its length to 120 years. It so happened that of the two modes of dividing the 18th and 19th dynasties mentioned in § 34 the former was con-

nected with the former of the two corruptions mentioned in this section, and the latter with the latter. We have thus :—

C.

	N. K.	Began.		Lasted years.
18th dynasty, . .	–185,	26th October,	1717,	348
19th dynasty, . .	163,	31st July,	1369,	194
20th dynasty, . .	357,	13th June,	1175,	178
21st dynasty, . .	535,	29th April,	997,	121
22nd dynasty, . .	656,	30th March,	876,	98
23rd dynasty, . .	754,	6th March,	778,	7
24th dynasty, . .	761,	4th March,	771,	44

D.

18th dynasty, . .	–185,	26th October,	1717,	393
19th dynasty, . .	208,	20th July,	1324,	149
20th dynasty, . .	357,	13th June,	1175,	74
21st dynasty, . .	431,	25th May,	1101,	121
22nd dynasty, . .	552,	25th April,	980,	120
23rd dynasty, . .	672,	26th March,	860,	89
24th dynasty, . .	761,	4th March,	771,	44

The remaining parts of these lists are the same as in B. and A. It will be observed that in none of these three corrupt lists is there any trace of wilful fraud. B. was derived from A. by a blunder; and C. and D. were produced by injudicious attempts at correcting it, which only magnified the evil. In all these the accession of the 18th dynasty is placed 186 years too early; but in C. we have that of the 22nd 104 years too late; and as this occurred a few years before the death of Solomon we have here a gross anachronism. So also in D. the accession of the 23rd dynasty is placed 82 years too early, i. e. 84 years before the first Olympiad, which, according to a marginal note of MANETHO, it ought to have preceded by only a short interval.

36. The first intentional corruption of MANETHO'S text was probably of a very early date. It originated in a fancy respecting the Trojan war. Some

Egyptian chronologers thought that the taking of Troy, which they placed in 1184 B. C., synchronized with the accession of the 20th dynasty, and they therefore threw this nine years too far back. The mode in which they did this was to add nine years to the 21st dynasty, giving thirty-five years, instead of twenty-six to its last king. This change was made in some copies of MANETHO, not in all, and it may have been antecedent to the formation of the lists C. and D. We may, however, consider these two lists to have been independently modified into what we may call C′. and D′. the first four lines of which are as follows, the remaining parts being the same as in C. and D. respectively:—

C′.

	N. K.	Began.		Lasted years.
18th dynasty, . .	—194,	29th October,	1726,	348
19th dynasty, . .	154,	3rd August,	1378,	194
20th dynasty, . .	348,	15th June,	1184,	178
21st dynasty, . .	526,	2nd May,	1006,	130

D′.

18th dynasty, . .	—194,	29th October,	1726,	393
19th dynasty, . .	199,	22nd July,	1333,	149
20th dynasty, . .	348,	15th June,	1184,	74
21st dynasty, . .	422,	28th May,	1110,	130

37. It was observed, however, that the number of 990 years, which MANETHO had given as the sum of the 18th and six following dynasties, was exceeded by this arrangement; and a new critic, who believed in the truth of this number, and who had no faith in the Trojan war, gave a new version of the latter list, which we may call D″. He restored the first two lines of D., and thus brought back the accession of the 20th dynasty to its date in B., or to 1175 B. C.; but having before him a list of kings in the 21st dynasty, which amounted to 130 years, and having a number, 74, as the summation of the 20th, which was accompanied by no names, he deducted the nine years in excess from this 74, instead of from 130. Thus the list D″. was formed, which I will give in full, because it is that from which the list of AFRICANUS has been

derived by a series of deliberate falsifications, the objects of which I am going to explain:—

D″.

	N. K.	Began.		Lasted years.
18th dynasty, . .	– 185,	26th October,	1717,	393
19th dynasty, . .	208,	20th July,	1324,	149
20th dynasty, . .	357,	13th June,	1175,	65
21st dynasty, . .	422,	28th May,	1184,	130
22nd dynasty, . .	552,	25th April,	980,	120
23rd dynasty, . .	672,	26th March,	860,	89
24th dynasty, . .	761,	4th March,	771,	44
				990
25th dynasty, . .	805,	21st February,	727,	44
26th dynasty, . .	849,	10th February,	683,	157
27th dynasty, . .	1006,	2nd January,	526,	„

38. This was the version of MANETHO, on which the early Christian, or perhaps the Jewish, chronologers set to work, in order to bring it into harmony with the Old Testament, or rather with their fanciful interpretations of the Old Testament. A comparison of it with the genuine list of MANETHO in § 33 will at once show how very erroneous this list is; but it has, at least, the merit of being an honest one; the successive changes made in it were the results of mistakes, or of injudicious attempts to correct mistakes.

39. The early Christians (and, there is some reason for supposing, the early Jews also) placed the Exodus in what we now call 1667 B. C. S. CLEMENS says that it was 345 years before the renewal of the Sothic cycle; that is, before the 20th of July, 1323 B. C. It was in the true year of the New Kingdom – 136, beginning 14th of October, 1668, or 49 years after the false date of the accession of the 18th dynasty in list D″. This ancient date of the Exodus, which is in fact March or April, 1667 B. C., is 176 years before that in the margins of our Bibles. Of this difference, 160 years are due to the difference of reading in 1 Kings, vi. 1, where the ancients read "640th," instead of "480th" of our present text. The remaining sixteen years are probably due to a difference in computing the reigns of the Jewish kings, which Dr. HALES

and others make sixteen or seventeen years more than Archbishop USSHER did. I have myself no doubt as to the ancients being right in reading 640th in 1 Kings, vi. 1; but I do not feel it desirable to discuss here the exact date either of the Exodus, or of the death of Solomon. The fact with which we have at present alone to deal is, that all ancient Christian chronologers,—I mean, all before JULIUS AFRICANUS,—placed the Exodus in the Egyptian year which began in October, 1668, 49 years after the then received date of the accession of the 18th dynasty.

40. Now, a large number of the early Christian chronologers believed that the accession of the 18th dynasty was identical with the Exodus of the Israelites. A more absurd opinion it is scarcely possible to conceive; and yet we know that it was held by JOSEPHUS and AFRICANUS, as well as by the ancient Christian chronologers generally. Hence it became an object to strike off 49 years from the New Kingdom. Of these 11 were struck off from the last two dynasties, being the odd units in 44 and 157, and the remaining 38 were struck off from the 24th dynasty, which was thus reduced from 44 to 6 years. As the sum of the dynasties of the New Kingdom to the end of the 24th was 990 years, according to a memorandum still existing in the text of AFRICANUS, this reduction would make them 952; and 952 is the actual sum of these dynasties according to the present text of AFRICANUS. Hence we obtain the text of MANETHO, which I will call E., falsified so as to make the origin of the New Kingdom coincide with the Biblical date of the Exodus.

E.

	N. K.	Began.		Lasted years.
18th dynasty, . .	– 136,	14th October,	1668,	393
19th dynasty, . .	257,	8th July,	1275,	149
20th dynasty, . .	406,	1st June,	1126,	65
21st dynasty, . .	471,	15th May,	1061,	130
22nd dynasty, .	601,	13th April,	931,	120
23rd dynasty, .	721,	14th March,	811,	89
24th dynasty, .	810,	20th February,	722,	6
25th dynasty, .	816,	18th February,	716,	40
26th dynasty, .	856,	8th February,	676,	150
27th dynasty, .	1006,	2nd January,	526,	„

41. This was the corrupted, and in fact falsified, text which AFRICANUS had before him, and he proceeded to falsify it still further. He had a theory of his own respecting the Exodus. He placed it 130 years before 1668, or in 1798 B. C. He added 110 years to the chronology of the Judges, and 21 years to the reign of Cyrus, confounding his accession to the crown of Persia in 559 with his conquest of Babylon in 538 B. C. This is in fact 131 years, but it is always called 130 by SYNCELLUS. I rather suspect that he added 22 years to the reign of Cyrus, and omitted 2 years in some other place. At any rate, his date of the Exodus corresponds to 1798 B. C.; and to bring his Egyptian chronology into harmony with his Jewish chronology, he added 130 years to the 19th and 20th dynasties—60 to the former, and 70 to the latter. Thus the first three lines of his list became as follows, the remainder being as in E.:—

E′. (AFRICANUS).

	N. K.	Began.		Lasted years.
18th dynasty, . .	−266,	16th Nov.,	1798,	393
19th dynasty, . .	127,	9th Aug.,	1405,	209
20th dynasty, . .	336,	18th June,	1196,	135

A subsequent corrector struck off the 130 years which AFRICANUS had added, thus restoring the Biblical date of the Exodus as that of the accession of the 18th dynasty. He, however, took the 130 years from the 18th dynasty itself, the duration of which he thus reduced to 263 years. According to his scheme, which is what SYNCELLUS gives as that of AFRICANUS himself, the first line would be,

	N. K.	Began.		Lasted years.
18th dynasty, . .	−136,	14th Oct.,	1668,	263

the next two lines as in E′., and the remainder as in E.

42. It appears from what I have said, that the supposed facts on which LEPSIUS, BUNSEN, DE ROUGÉ, and others, have most confidently relied, as established by the authority of that "most trustworthy" writer AFRICANUS—I mean, the 209 and 135 years of the 18th and 19th dynasty, by which 130 imaginary years are interposed between Rameses I. and Shishonk I., and the 6 years of the 24th dynasty, by which 38 real years are struck off—are the very changes

which AFRICANUS and his Christian predecessors made, in the most unwarrantable manner, in order to bring MANETHO's already corrupted lists into harmony with the Old Testament, as they then read it.

43. I must now show how the numbers which we now find in the Old Chronicle, quoted by SYNCELLUS, have been corruptly deduced from the genuine text. The years assigned in this Chronicle to the different dynasties were derived from those in the list C. by two successive falsifications. The first of these had for its object to rectify the accession of the 18th dynasty, by referring it to the Biblical date of the Exodus, which we have seen to have been placed within the Egyptian wandering year which began 14th October, 1668 B. C., and of course to have actually occurred in March or April, 1667 B. C. The compiler of the Old Chronicle did not confound the expulsion of the Shepherds with the Exodus of the Israelites, as JOSEPHUS and AFRICANUS and his predecessors had done. He thought that the 18th dynasty commenced the persecution of the Israelites; that Moses was born a year after its accession, and the Exodus took place 81 years after its accession, when Moses was 80 years old; and that, consequently, the accession of the 18th dynasty was in the Egyptian year – 217, which began 3rd November, 1749 B. C. This was 32 years before the date in C. (§ 35), and the corrupter of the text accordingly added 12 years to the 23rd dynasty, and 20 to the 26th, as in the following list F. We see that in the Old Chronicle the sum of the seven dynasties so often spoken of is 1002 years, 12 years more than the true number preserved by AFRICANUS.

F.

	N. K.	Began.		Lasted years.
18th dynasty, . .	– 217,	3rd Nov.,	1749,	348
19th dynasty, . .	131,	8th Aug.,	1401,	194
20th dynasty, . .	325,	21st June,	1207,	178
21st dynasty, . .	503,	7th May,	1029,	121
22nd dynasty, . .	624,	7th April,	908,	98
23rd dynasty, . .	722,	14th Mar.,	810,	19
24th dynasty, . .	741,	9th Mar.,	791,	44
25th dynasty, . .	785,	26th Feb.,	747,	44
26th dynasty, . .	829,	15th Feb.,	703,	177
27th dynasty, . .	1006,	2nd Jan.,	526,	„

44. The list of dynasties in the Old Chronicle differs from this only by its having undergone an additional corruption. In it there are 228 years given to the 20th dynasty, and only 48 to the 22nd; 50 years having been taken from the latter, and added to the former. The motive for this change is not difficult to discover. The King of Egypt who took Jerusalem in the 5th year of Rehoboam is called Shishak. Modern Egyptologers identify him with the Σέσωγχις of AFRICANUS, the first king of the 22nd dynasty, which, according to A., the genuine list of MANETHO, began to reign in 980 B. C. This is in conformity with the received chronology; but the 22nd dynasty did not begin to reign till 908 B. C., according to list F.; while the author of that list placed the fifth of Rehoboam in or about 986 B. C. He, therefore, felt himself under an obligation to obviate this anachronism by making some change. MANETHO gives the names of all the kings of the 21st dynasty, and none of these has any resemblance to Shishak; but no name is given for the 20th dynasty. The reason of this was, doubtless, that all, or almost all, the kings of this dynasty bore the one name of Rameses. The compiler of the Old Chronicle thought, however, that Shishak must have belonged to this dynasty, and that it must, therefore, have extended till after 984 B. C. He chose to add a round number of years to the dynasty, and this could be no other than 50. Thus we have, according to the Old Chronicle:—

	N. K.	Began.		Lasted years.
18th dynasty, . .	-217,	3rd Nov.,	1749,	348
19th dynasty, . .	131,	8th Aug.,	1401,	194
20th dynasty, . .	325,	21st June,	1207,	228
21st dynasty, . .	553,	25th April,	979,	121
22nd dynasty, . .	674,	26th March,	858,	48
23rd dynasty, . .	722,	14th March,	810,	19

The remainder as in list F., last section.

45. I now come to EUSEBIUS, whose list, it appears to me, has undergone a modification since it was originally drawn up. That modification cannot, I think, have originated in the error of a copyist; it must be EUSEBIUS' own. Whether the list in its first form, which I will call G., was drawn up by EUSEBIUS himself, and afterwards corrected to what we now have, I will not pretend to say.

If not, we must suppose that he borrowed a great deal from some other chronologer whose name is unknown. EUSEBIUS, or whoever was the compiler of G., adopted the first four lines of C′.,—those in which it differed from C. (§ 35), and the date of the accession of the 22nd dynasty; but he reduced the length of the dynasty to 49 years. This was the sum of the only three reigns in the dynasty of which MANETHO had given the lengths. He had given two summations of three reigns each; and as they amounted to 67, or perhaps 71, years, while the list C. had only 98 years for the whole dynasty, it was necessary to cut them down. The most natural course was to strike them off altogether, and to appropriate the years which he would thus have to spare to the 23rd dynasty, which had only 7 years for four named kings. The list G. would thus be:—

	N. K.	Began.	Lasted years.
18th dynasty, . .	194,	29th Oct., 1726,	348
19th dynasty, . .	154,	3rd Aug., 1378,	194
20th dynasty, . .	348,	15th June, 1184,	178
21st dynasty, . .	526,	2nd May, 1006,	130
22nd dynasty, . .	656,	30th March, 876,	49
23rd dynasty, . .	705,	18th March, 827,	47
24th dynasty, . .	752,	6th March, 780,	44
			990

The correct number 990 for the sum of the seven dynasties is thus attained; but if EUSEBIUS had continued as in C., which does not differ from A. in its concluding part, he would have placed the conquest of Egypt in 535 B.C. To avoid this anachronism, he added 10 years to the length of the 26th dynasty, thus concluding:—

	N. K.	Began.	Lasted years.
25th dynasty, . .	796,	23rd Feb., 736,	44
26th dynasty, . .	840,	12th Feb., 692,	167
27th dynasty, . .	1007,	2nd Jan., 525,	„

46. Now, the list of EUSEBIUS differs from this in bringing down all the dates before the accession of the 24th dynasty three years. He effected this by

making the 23rd dynasty to last only 44 years, in place of 47. And it is very remarkable that, along with these Egyptian dates, he brought down the date of the taking of Troy, thus preserving the synchronism which the Alexandrian chronologers had imagined. His reason for making this change I take to be this:—His date of the Exodus was 1511 B. C., 133 years before the accession of the 19th dynasty. He considered it necessary that the death of a king of Egypt should synchronize with the Exodus; and as the last five reigns of the 18th dynasty lasted 136 years, he effected the necessary synchronism by depressing the accession of the 19th dynasty three years. This led him to depress by three years the accessions of all the dynasties connected with this by sure intervals. He stopped at the 23rd dynasty, the duration of which was a mere inference of his own, not supported by any genuine reading; but by so doing he reduced the 990 to 987, thus furnishing the means of detecting what he had done.

47. I have been the more particular in establishing the correct readings of MANETHO, because M. BRUGSCH assumes the truth of the extended chronology in vogue among Egyptologers, and builds on it an argument for the antiquity of the fixed year beginning in the latter part of August. We have a date, he says, of the rising of Sothis on the 28th Epiphi in the reign of Thothmes III. This implies that the year then began on the 27th August. The wandering year of the astronomers would do this in the year 1476–3 B. C.; but, according to M. BRUGSCH's chronology, Thothmes III. could not have been king at that time. Therefore he supposes that the civil year of the Egyptians could not have been the wandering year, but must have been a fixed year, beginning near the end of August. In reply to this it might be said that M. CHABAS, who agrees with M. BRUGSCH as to the chronology of the dynasties, has shown that it is not *certain* that this inscription belongs to the reign of Thothmes III. I think, indeed, that he has failed to show that it is not highly probable; but if I believed in the chronological system of MM. CHABAS and BRUGSCH, I should far rather believe with the former that the inscription was of a later date than M. BRUGSCH supposes, than admit the existence of a fixed civil year beginning in August, of which there is no other proof. In fact, however, if my chronological system, as above explained, be adopted, the date of 1476–1473 B. C. falls

within the reign of Thothmes III., as it seems to me most probable that the inscription ought to do.

48. There is another ancient date, which M. BRUGSCH alleges to refer to his civil year, but I cannot admit that there is a shadow of evidence that it does so. He quotes an inscription of Pepi at Hamamât, in which a panegyry is said to be celebrated in the 18th year of Pepi on the 27th Epiphi, *sep tapi*, which he says means, "on the 1st day of the Sothic, or sacred, quadrennium:" from this he argues that the 27th Epiphi of the civil year corresponded to the 20th July, and of course the 1st Thoth of the civil year to the 28th August. As a complete refutation of this, I need only state the following facts, which I give on M. BRUGSCH's own authority.—"Recueil," p. 98. In Wadi Magara, near Mount Sinai, there is an inscription similar to this, dated in the 18th year of Pepi, but on the sixth Mesore, nine days after the other inscription. Will M. BRUGSCH affirm that Sothis rose 9 days later in Wadi Magara than it did in Hamamât, about three degrees south of it? or in what other manner will he account for the fact which he so strangely suppresses in 1864, having published it, and drawn special attention to it, in 1863? I will only add that *sep tapi* is translated by others, and was translated by M. BRUGSCH in 1863, "the first time." Pepi celebrated the Set panegyry, of which he was probably the originator, in different parts of his dominions on different days; on the 27th Epiphi at Hamamât, on the 6th Mesore at Wadi Magara; at other places on other days of which no record has been preserved. We have no right to assume that any of these days was the first of Thoth of the sacred year; most probably, indeed, all these dates are to be referred to the sacred year. It is most probable that Pepi reigned before the wandering year began to be used; and as for the fixed civil year to which M. BRUGSCH refers these dates, it was never known till after the taking of Alexandria by Cæsar Octavianus.

49. The remarkable coincidences which I have pointed out—namely, that 2291 years (of 360 days) 4 months and 20 days, the duration assigned by the Turin papyrus to the 330 kings of its ten dynasties, should be *precisely* equal to 2260 years of 365 days; and that 2260 added to 103, the years of the 17th dynasty, and 1192, the years, which, according to my restoration of MANETHO above explained (§ 33), intervened between the accession of the 18th dynasty and the conquest of Egypt by Ochus, should be *precisely* equal to 3555, the

number of years which MANETHO places between Menes and Ochus—would in my judgment go very far to establish the existence of a civil year of 365 days, and that of a regnal year of 360 days, dating from each king's accession, if there remained any doubt as to either of these facts, after the evidence in support of them which I have already adduced. It will naturally be asked,—do I believe in this number of 3555 years as the actual interval between Menes and Ochus? This question I proceed to answer.

50. I believe the latter part to be authentic, or historic, in the strictest sense of the word. I think there is no more reasonable doubt that the 17th and following Egyptian dynasties began in the years B. C. which I have assigned to them in this paper, 1634 B. C. and following dates, than that the Grecian and Roman sovereigns reigned at the times generally assigned to them. I think, too, that it may be desirable to use the era of Menes as LEPSIUS has done; and we may do this as we use the year of the Julian period, carrying back the Egyptian wandering year proleptically. I do not, however, believe that there were 2260 years between Menes and the 17th dynasty, though the Egyptian chronologer who compiled the Turin Book of Kings calculated that there were. I do not think that there is *as yet* any decisive evidence on the subject one way or other; but my present belief is, that 2260 years is above the truth. Having at different times paid a good deal of attention to the Turin papyrus, I will in the first place state what I believe to be the system of its author. I will give its ten dynasties, the number of reigns of each, and the duration of each, as far as can be collected from the papyrus. It will be observed that inverted commas are used when the papyrus gives the number between them. Other numbers are computed from the length of the columns and from the numbers given in the papyrus conjointly. The first column gives the number of the dynasty according to the papyrus; the second gives the Manethonic dynasties which appear to correspond; the third gives the number of reigns; and the fourth, the duration:—

Pap.	Man.	Reigns.	Years.
I.	I.	12,	" 263,"—(Fr. 17)
II.	II.	5,	92?
			Sum " 355" ?*—(Fr. 44, l. 4)
III.	III. and IV.	29,	
IV.	V.	21,	
		Sum " 67,"—(Fr. 34[a], l. 4)	
V.	VI.	13,	" 181,"—(Fr. 61, l. 5)
VI.	VIII.	" 18,"—(Fr. 61, l. 1)	
VII.	XI.	25,	" 243,"—(Fr. 64, l. 1)
VIII.	XII.	8,	" 213, . 1 . 15"—(Fr. 72[a], l. 3)
IX.	XIII.	} 199,	
X.	SHEPHERDS		
		Sum " 330"	" 2291, . 4 . 20"

51. I will now offer a few remarks on this list. In the first place, the 3rd and 4th dynasties of MANETHO are, to a certain extent, distinguished in the Papyrus: Soris, the first king of the latter, has his royal title in red ink, but there is no summation before him.† Secondly, I cannot think that the Papyrus contained 330 kings. If there were allowed to be 70 or 80 in the last two dynasties, that is, 200 or 210 in all, I should think it the outside limit. Accordingly, I think that the remaining 130 or 120 kings belonged to the dynasties omitted in the Papyrus, but found in MANETHO. The author of the Papyrus probably considered the remaining dynasties to be contemporary with those he recorded; but he seems to have considered these last to have all

* The hundreds are uncertain. Perhaps we should read 455; and, of course, 192 in the preceding line.

† In my contribution to Sir GARDINER WILKINSON's volume, in 1851, I endeavoured to find a dynastic sum in the mutilated line preceding that which contains the name of Soris (Fr. 18, l. 5). In this, however, I was mistaken, as is proved by the newly discovered Tablet of Abydos, where Soris (No 16), is preceded by a king (No. 15), evidently identical with the mutilated name in Fr. 18, l. 4.

reigned successively. At any rate, with the imperfect information which we possess as to the durations which he assigned to the several dynasties, it is impossible for us to say whether he did or not. Now, I think it is quite evident from other monumental evidence that of these ten dynasties all did not reign in succession. I suspect that the 6th and 7th, and again that the 9th and 10th, were in part contemporary; but I think it certain that the whole of the 2nd and considerable portions of the 1st and 4th were contemporary with the 3rd. The complete Tablet of Abydos, lately excavated by MARIETTE BEY, and published by M. DÜMICHEN in the "Egyptian Zeitschrift" for last October, seems to me to prove this. Its first and second kings appear to me to represent the Menes of MANETHO, the two kings of that name in the Turin papyrus, who together reigned 62 years. The next three kings in the Abydos list represent the Athotis of MANETHO, having reigned together 57 years; but the last of these five is the Tosorthros of MANETHO, the second king in the 3rd dynasty of the Papyrus; as Necheroches, whose name occurs first in the Papyrus, is the first of the 3rd dynasty in MANETHO. No king of the 2nd dynasty of MANETHO and of the Papyrus is found in the Abydos list; nor is any of the last seven kings of their 1st dynasty. After these we have in the Abydos Tablet 22 more kings of the 3rd dynasty of the Papyrus; the Papyrus having had 27. The Tablet contained only six kings of the next dynasty, and yet the Papyrus has 21 kings belonging to it.* To me it seems quite evident that this dynasty, originally confined to the extreme south of Egypt, displaced in course of time the second dynasty in Middle Egypt, and did not reign at Memphis till within a few reigns before its close. I will not, however, pursue this subject. I return to the Egyptian year.

52. I think I have proved, in opposition to M. BRUGSCH, that the Egyptian civil year was a wandering year of 365 days, as has been the generally received opinion. The sacred or Sothic year was in use along with this; and the two kinds of years coincided as to their commencements in four years of every

* The fifteenth royal name in this dynasty, as it appears in the Papyrus, is followed by the words, "passed in his reign years ——" The number is destroyed. This seems to indicate that this was the first of the dynasty who reigned in Memphis. It follows that seven of the dynasty did so, one of whom is omitted in the Abydos Tablet.

Sothic cycle. The 1st of Thoth of the civil year coincided with the 6th of the Epagomenæ of the Sothic year in the first year of the cycle; and in the remaining 1460 years it coincided with each of the 365 days of the ordinary Sothic year for four years in succession; coinciding with the 5th Epagomenæ in the 2nd–5th years of the cycle, and so on backwards to the 1st Thoth, with which it coincided in the 1458th to the 1461st. At the close of the cycle, which began under the 19th dynasty, these four years were those which began in A. D. 134, 135, 136, and 137, in the first two of which the two years both began on the 21st of July, and in the last two on the 20th of July. Of course, the Sothic year always began on the 21st of July in years A. D. of the forms 134–4*i* and 135–4*i*, and on the 20th in years of the form 136–4*i* and 137–4*i*. On any given day, say the *n*th, of the Sothic year, the civil year would begin in the four years 138–4*n*, 139–4*n*, 140–4*n*, and 141–4*n*. Hence it follows that the Esne Calendar, in which the civil 1st of Thoth, the new year of "the year of the ancients," began on the 9th Thoth of the Sothic year (see § 12), was composed for one of the four years A. D. 102, 103, 104, or 105; the 1st of Thoth being on the 21st of July in the two former years, and on the 20th in the two latter. To which of these four years the Esne Calendar belongs, I will show further on.

53. The civil or wandering year of the Egyptians dates from the 20th of July, 2783 B. C., the 1st of Thoth of its 1st year. The Sothic year, with its *quadrennia* of 1461 days, was more ancient still. It must date from the time when the solstice coincided with the rising of Sothis. According to LARGETEAU'S Tables, this would happen about 3200 B. C.; but an error of a few centuries may exist in this calculation. Before this astronomical epoch the Egyptian year began at the solstice of summer, or at the beginning of the inundation, which was practically the same thing.

54. It seems certain, however, that the Egyptians used a different kind of year from either of these; and that this originated at an earlier period than that just mentioned, and continued in use till long after the Roman conquest. I speak of the lunar year, which began at the new moon after the solstice, and had four lunar months of inundation, four lunar months of winter, and four, or, when necessary, five months of genial season. The date of the commencement of this lunar year as the new moon *next after* the solstice, not the new

moon nearest to it, may be inferred from the words of PLINY, who says that the inundation began at the new moon that followed the summer solstice. This is obviously absurd, if the actual commencement of the inundation be intended. PLINY had heard, however, that "the tetrameny of the inundation" of what may be called the popular year began at this time, and he referred this, in error, to the actual inundation.

55. This lunar year was recognised by LEPSIUS in the introduction to his Egyptian Chronology, published in 1848 (pp. 150, and following, and 218). As proofs of its existence in remote antiquity, he gave the use of the moon's figure in the hieroglyphic group for "month," the mention in very ancient inscriptions of monthly and half-monthly festivals, probably those of the new and of the full moon, and of the feast of the commencement of the short year, that of 354 days, as he interpreted it. What LEPSIUS then said is not altogether defensible; he thought at that time that the first season was that which followed the inundation, and some of his statements assume this error. I suspect, also, that "the short year" of the ancient inscriptions was a wandering lunar year of twelve months without intercalation, such as is now used by Mahometans. It appears to me certain that this kind of year was used by the Egyptians in the Roman period, and it is not likely that it was then introduced for the first time.

56. The commencements of these lunar years seem to me to be clearly indicated in the Calendar of Esne, which M. BRUGSCH has published in his recent work, but which he confesses his inability to explain. To explain it on his system is simply impossible; but its explanation seems to me, with my views, as above explained, the simplest thing in the world. M. BRUGSCH finds in this calendar the commencements of three kinds of years noted—one of which, he says, is the Sothic year, but the two others are unknown years. I find in the Esne Calendar the commencements of *four* years noticed:—The Sothic year; the civil or wandering year; the regulated lunar year, beginning soon after the summer solstice; and the short or wandering lunar year.

57. I will first give the extracts from the calendar bearing on the subject; and as this is a question of interpretation, and not of translation, I will translate from M. BRUGSCH's French, pp. 19–21:—

"1st Thoth, at the doubly-good beginning of the year, the panegyry of Amon, and the panegyry of Chnoum."

" 9th (Thoth), panegyry of Amon, panegyry of Ra, and panegyry of the new year of the ancients.

" 26th Payni, at the panegyry of the new year, panegyry of the opening in the temple of the god, to give clothing to the sacred crocodiles."

M. BRUGSCH quotes a passage from the " Commentary on the Phenomena of ARATUS," in which an ancient year of 365 days only, wandering through the seasons, is expressly mentioned (p. 21). He might have quoted many other testimonies to the same fact, as I have done in the former part of this paper. He says, however, to my great astonishment, that he can find no trace of such a year on the monuments, and pronounces that the sacred or Sothic year was the year of the ancients. According to his views, therefore, the Esne Calendar speaks of three years, commencing on the 12th of July, the 20th of July, and the 3rd of May. Of the first and third of these he offers no explanation. M. MARIETTE, in a paper in the " Revue Archeologique," for March, 1865, which has just reached me as I write this section, appears to think, on the contrary, that the three years indicated began on the 1st Thoth, 9th Thoth, and 26th Payni of M. BRUGSCH's pretended civil year, or of the Alexandrian year, that is, on the 29th of August, 6th of September, and 20th of June. The last of these three beginnings he connects with the summer solstice, and the beginning of the inundation. Of the second, however, which is distinctively called " the year of the ancients," he offers no explanation.

58. In fact, no explanation can be given on M. BRUGSCH's hypothesis. On mine, the beginnings of four years are noted:—The Sothic, the old wandering civil, the regulated lunar, and wandering lunar years. The calendar belongs to the Sothic year which began 21st July, A. D. 103 ; which was the new moon according to Egyptian usage, the day on which the conjunction took place (about 9 P. M. Memphitic time).* On this day two festivals coincided—one of

* This was the conjunction *next after* the solstice, though not the one nearest to it. See § 54. According to LARGETEAU'S Tables, the preceding conjunction was on the 22nd June, at 6 A. M., while the sun did not reach the tropic till the 24th of June, at 3 P. M. In Egypt this was the most natural commencement of the lunar year, the solstice being coincident with the beginning of the inundation. The Athenian year, before the introduction of cycles, began at the same time; but in Attica there was no natural reason for its doing so. We can only account for this by supposing that the Athenians derived their year from Egypt. Their own

which fell on the 1st of the Sothic Thoth, the other on the 1st of the lunar Thoth; and it was a "doubly-good [or festive]" day. Eight days after, the 29th July was the first day of the wandering or civil Thoth; and 295 days, or ten lunations, after the 1st Thoth of the calendar, was the first day of the wandering lunar year, 11th May, A. D. 104. See §§ 12 and 52, where I have proved that the dates in the Esne Calendar refer to the Sothic year, and that it was composed for one of the four years, A. D. 103–106.

59. The lunar year is not often used in monumental dates; and yet I think it is so sometimes. For instance, a scarabæus ("Ros. M. R.," xliv. 2) states that on the 1st Athyr in the 11th year of Amenhotep III. a great basin began to be dug, and that on the 16th Athyr, the great panegyry of the inundation was celebrated there. This could not be the 16th Athyr of M. BRUGSCH's fancied year, which would fall in November, from the 8th to the 12th; nor of the Sothic year, whose 16th Athyr would fall on the 3rd or 4th of October; nor could it be of the wandering year, which would begin some nine days later; but the Nile is at its height, according to the Egyptian almanacs cited by M. BRUGSCH (p. 6), 96 days after the solstice, or on the 25th September. This would well suit the date according to the lunar calendar, the 16th Athyr being 74 days after the new moon which followed the solstice. Besides, the mention of the 1st and 16th days of the month suggests the lunar calendar. The Egyptians had feasts on the 1st and 16th of every month; and LEPSIUS has long since pointed out that these must be lunar months. M. BRUGSCH (pp. 10, 11) affirms that the Nile attains its greatest height 141 to 144 days after the solstice. Evidently, as it appears to me, he has confounded the greatest height of the inundation with its termination. The death of Osiris may have been connected with the latter, but certainly not with the former.

60. Another date which appears to me evidently lunar is that of the Exodus. This is said over and over again to have occurred in the month Abib, which I cannot believe to be anything else than the Egyptian Epiphi, or Epip, pronounced by the Arabs of this day Ebîb. The received opinion is, that this is a Hebrew derivation of the root אבב, the exact meaning of which is

tradition of Cecrops was, doubtless, in the main correct. I may add, that the Athenian δῆμος, in its original sense, and the Egyptian *dîmi*, appear to have been similar in their nature, as well as identical in their name.

doubted; but אָבִיב is interpreted new or green corn in the ear. That it signifies, as a Hebrew word, corn in the ear, is evident, from Lev. ii. 14; but *ripe* corn would be, at least, as suitable in that text as *green* corn; and the use of the root in Assyrian, where it is very common, proves that the signification of *ripeness* attaches to the root. *Abub* is ripe corn, ready for the sickle; the character for the syllable *ib* represents a man cutting down corn; and אֵב, doubling the final consonant in its cases, is an adjective denoting the colour of silver and of a building stone of an excellent kind—the *zakur*—probably alabaster, but certainly not lapis lazuli, as Sir H. RAWLINSON imagines. It would follow from this that *Abib* was the month of *ripe corn*. It is very possible that the Hykshos, who were of the Semitic stock, may have given the name *Abib* to the eleventh Egyptian month, in which in common, i. e. not embolismatic, years, wheat was usually ripe. It is possible, also, that the Egyptian name Epip had an Egyptian derivation, yet undiscovered. It seems, however, on either supposition, all but certain that the name of the month in the Pentateuch is taken from the Egyptian Epiphi, and that it is asserted that the Exodus took place in the eleventh lunar month of the Egyptians.

61. Now, from this fact we may draw two inferences:—First, that the Exodus took place in the eleventh month of an embolismatic year, and indeed in one in which the new moon of the lunar Thoth was a very few days after the summer solstice. From the solstice to the vernal equinox was 271 days, and from the new moon of the first to the new moon of the eleventh Egyptian month was 295 days. It follows from this that it would not be possible for the first new moon to be that next after the summer solstice, and the eleventh to be that next after the vernal equinox, if the interval from the solstice to the new moon exceeded five days. Considering the inequalities of the moon, it should not, for safety's sake, exceed four days. Generally speaking, the lunar Payni would coincide with the Hebrew month that was afterwards called Nisan; but in some few years the lunar Epiphi would coincide with it, and such a year must be that of the Exodus. If, therefore, we know the date of this approximately, we can ascertain it with exactness. For example, the Exodus could not have been in 1491 B. C., Archbishop USSHER's date; but it might have been in 1489 B. C.

62. Secondly, I infer from the fact that I have been considering that the statement, so often repeated in the Pentateuch, that the Exodus took place in

the month Abib, or Epiphi, could not have been made by a writer of a later age than the Exodus, or at any rate by an Israelite who was a stranger to Egypt. This is one of those undesigned coincidences with facts not generally known, which negative the supposition that the document in which they occur is a forgery.

63. I had intended, at the conclusion of this paper, to have examined several detached statements made by M. BRUGSCH in his "Materiaux." I find, however, that to do this would render it impossible for me to conclude this paper in time for it to be read during the present Session of the Royal Irish Academy. I wish, also, to compare the statements to which I have referred with others that as yet I have not seen. I content myself, therefore, with once more recording my decided conviction that the Egyptians never had a fixed year other than that which began on the 21st or 20th July of our present calendar; that they had a wandering year of 365 days, coinciding with this as to its commencement in A. D. 134–137 and 1460, and 2920 years before these; and that they had also a lunar year, beginning at the new moon next after the summer solstice, or the commencement of the inundation.

APPENDIX.

IT was not till after I had written out a fair copy of that portion of the preceding paper which treats of the 3555 years between the accession of Menes and the conquest of Ochus, and of its two parts, 2260 years from Menes to the accession of the seventeeth dynasty, and 1295 from the last event to the final subversion of the native monarchy—the latter of which intervals I hold to be of certain, but the former of very doubtful, authenticity—it was not, I say, till after this that I saw the copy of the "Four hundred year Stèle," published by M. MARIETTE, with his comments upon it, and an essay on the same subject by M. CHABAS. Both these writers agree in condemning the views of M. DE ROUGÉ, who inferred that Rameses I. was descended from the Hykshos, or Shepherds. I have not seen M. DE ROUGÉ's own paper, but I cannot hesitate to adopt the views of his critics on the point in question. What is most interesting, however, in this stèle is the date which it bears. "In the 400th year of a certain king, the 4th of Mesore." Who is this king? and what is the epoch which began with his reign. I have very little doubt that he was

the first king of the last Shepherd dynasty, the 17th of MANETHO, which is said to have been a dynasty of "Shepherds and Thebans," the latter being tributary to the former. After the dynasties enumerated in the Turin papyrus,—which reigned, according to that document, 2291 regnal years (of 360 days) 4 months and 20 days; equivalent to 2260 civil years of 365 days, but which were never reduced to civil years till the calculation was made for the whole period at its close,—a new era commenced, in which the reigns of the different kings were, in Lower Egypt at least, or at any rate in the neighbourhood of San, that is to say, Avaris, the royal residence of the Shepherds, where this inscription was found, dated in civil years from the accession of the 17th dynasty. Thus, the year of this inscription, the 400th year from this era, is the 2660th from the conventional era of Menes, or that which began 30th June, 1235 B. C.; and its actual date is 29th May, 1234 B. C. The inscription is dated in the reign of Rameses II.; and, though it is not stated in what year of his reign it was engraved, it may be seen that it was at a late period in it. The father of the person commemorated appears from his name to have been born in the reign of Rameses I.; and the person commemorated himself was a "first prophet" of Sutech—an office which, except in cases where it was held by one of the royal family, necessarily supposes that the person holding it is advanced in life. Now, according to my chronological system, the date in the 400th year of Noubti would be in the 65th year of Rameses II., which is in complete accordance with the indications of the Tablet. This king Noubti was probably that Asseth who is named by SYNCELLUS as a reformer of the Egyptian calendar, and by JOSEPHUS as a Shepherd. I take this name to be corrupted from the throne-name in the Tablet, which should be read *Aa-pheh-seth*, according to the analogy of *Men-pheh-râ* (Menophres), the throne-name of Rameses I. The aspirates *th*, *kh*, and *ph*, when they come between two vowels, are apt to lose their sounds in Egyptian, as in many other languages; and in transcribing Egyptian names, the Greeks contracted them as much as they could. I think, therefore, that A-σήθ is a very possible representation of the throne-name before us.

The conventional era of Menes began 2260 Egyptian civil years before that of Noubti; and the last named era preceded that of the New Kingdom by 103 years, and that of the new Sothic cycle, or of Menophres, by 311 years.

ADDITIONAL APPENDIX.

AFTER the first sheet of this paper was printed, I received the "Revue Archéologique" for August, which contains an unexpected confirmation of the opinion expressed in § 12, that the horizontal line was not required, in Greek writing of the Roman period, over numeral letters which are preceded by L. A chromo-lithograph is given of the writing on a Græco-Egyptian Ostracon of the reign of Antoninus. It concludes with the date, L κγ

Αντωνινου Καισαρος του κυριου θωθ ιθ̄. There is a horizontal line over the *ιθ*, after the name of the month, but none over the *κγ* after L.

Within the last fortnight I received a copy of a work of Professor LAUTH, of Munich—"Manetho und der Turiner Königs-Papyrus." As the views of the ingenious author are completely at variance with those expressed by me in § 31, and again in §§ 50 and 51, of the preceding paper, I desire to add a few brief remarks. M. LAUTH admits that the Papyrus mentions 330 kings, in Fr. 1, l. 4; and 2291 years 4 months and 2 (4?) days, in l. 6; but, notwithstanding the statement of HERODOTUS (b. ii., c. 100), that the Egyptian priests read to him out of a book the names of this precise number of kings *after Menes*, he contends that the Papyrus is here speaking of gods. This appears to me most improbable; and it does not appear to me any proof of its being the case that in lines 9 and 10 the Papyrus reverts to the reigns of the gods, giving summations exceeding 13,000 and 23,000 years.

Passing on to § 50, I find that Professor LAUTH rejects the greater part of the summations cited by me from the Papyrus. I can only appeal against his judgment to those who have studied the forms of the hieratic numerals; remarking, in the first place, that Dr. BIRCH, who prepared the transcript of the Turin Papyrus into hieroglyphics, which accompanied Sir G. WILKINSON's edition, agrees with my readings in almost every instance; and, in the second place, requesting my readers to refer to LEPSIUS' or WILKINSON's edition, in preference to M. LAUTH's. In Fr. 17 I was surprised and sorry to find that a new reading of the contents of the fragment has been substituted by M. LAUTH for that given by the two former editors. *Their* reading consists of incomplete characters, which may be completed to 263, the sum of the eight reigns in the first dynasty according to AFRICANUS; but M. LAUTH's reading admits of no such completion, nor has it indeed the appearance of a numeral at all. Of the number in Fr. 44 I will say nothing, as I admit that the true reading and the position of the fragment are doubtful: M. LAUTH reads 555 = 253 for the first, and 302 for the second dynasty. What I take to be 67 in Fr. 34[a], he cannot see to be a number at all. This is consistent; for the 60 is here formed precisely as in Fr. 17, as this appears in LEPSIUS' and WILKINSON's editions. In Fr. 61, l. 5, he reads 1081 in place of 181, making this the sum of all the dynasties to the end of the 8th, instead of the sum of the 6th. Of all his readings this is the most extraordinary; as the character for 100 has not the slightest resemblance to that for 1000, and the character formed precisely as here is read 100 by M. LAUTH in Fr. 1, l. 2.

Until the proper reading of these numbers be determined, it would be useless for me to discuss the details of the arrangement of the earliest kings in the Abydos Tablet, proposed in §. 51. I have seen nothing, however, in M. LAUTH's ingenious work, or elsewhere, to lead me into any doubt of its general correctness.

IV.—*On the Science of Language.* *By the* Rev. James Byrne, A. M.

Read May 14, 1866.

NOTHING can be more uninteresting than a grammar or dictionary used merely for the purpose of learning a language;—nothing can be more interesting than the comparative study of grammars and dictionaries, for the purpose of ascertaining the laws of the phenomena of speech, and establishing the science of language. That science, when it attains maturity, will trace the manifold facts of language to their causes in human nature, for the knowledge of causes is the ultimate aim of all science; and, in doing so, it will at once explain the genesis of language and the mental varieties of man. In whichever light we view the science of language, it presents one of the most attractive fields in which the mind can labour. In itself, language is the most astonishing production or outgrowth of human nature; and the investigation of the processes by which it attained its wondrous subtlety of structure and variety of development possesses an interest like that which belongs to the finest works of organic force, but higher, because speech is due to the forces of the mind. In proportion as the causation of language is ascertained, we shall be enabled to discern in its characteristic varieties the corresponding varieties to which these are due in the mental action of the various races of mankind. For language is the expression of thought; it gives a picture of thought which bears microscopic inspection; but that picture can be seen only under the light of a science which will show the characteristic mental action that corresponds to each characteristic feature of speech. By bringing into light the qualities of thought which are expressed in the various languages of men, the science of language

will reveal the essential grounds of those distinctions of human character which have been most influential in determining the historical development of the various races throughout its entire course. For man impresses his own character on the manifold products of his activity; and these, as they become traditional, maintain and confirm in him the qualities from which they derived their own distinctive features. All social phenomena spring from the mind of man; and, though many causes combine in determining them, they are all moulded by his informing spirit, and are all different expressions of his spiritual energy; and, if we would understand them, we must begin with the study of those which reveal most plainly the characteristic action of this predominant cause. Man, especially in those races which have high mental energy, surrounds himself with a mental world of habits, and institutions, and traditions, which he brings with him wherever he migrates, and these maintain the qualities of his thought in regions most diverse from those in which his mind was formed. If we are ever to have a scientific knowledge of that world of social activity, we must begin with the part of it which is most original, and which sprang most purely out of the common source of all. Language is the condition of all social action, and the pure expression of the spirit of man; its phenomena are the earliest social facts within our reach, and they transcribe the movements of the busy mind which called all the rest into being: they are the phenomena that must be understood first, and social science must begin with the science of language.

Science, however, comes slowly to maturity. Causes are not to be divined by ingenious conjecture; they are to be elicited from nature herself, by such a grouping of facts as shall betray nature's secrets and reveal the laws of her action. We must humbly watch the phenomena, to detect in their resemblances and differences, viewed in connexion with coexisting circumstances, significant intimations of their causes; and the science of language has hitherto been occupied in examining and comparing the facts, to take its instructions from them as to the formation of its theory. In each stage of its progress the theoretical suggestions of the facts guide subsequent observations; and, as several such anticipations of theory are made at the present day, it may interest those who have a taste for such inquiries to state briefly a few of the leading theoretical ideas which some of the facts of language suggest to one who has at least studied them patiently.

Speech involves two processes—the analysis of thought, and its expression; for facts are apprehended in the first instance as complex unities; and, in order to express them, it is necessary to analyze them into parts, and to express in words the parts thus distinguished. The analysis of thought is seen in the partition of speech into sentences, and of sentences into constituent words, and its expression is accomplished by roots and their modifications; and both classes of phenomena are suggestive of theoretical considerations not devoid of interest. We shall consider them in succession as constituting the two great divisions of the science of language; and as the varieties of language with respect to its analytic structure are more suggestive of the mental varieties of mankind, they shall be noticed first.

I. The features which, according to that most profound and philosophical of philologists, W. VON HUMBOLDT, characterize the most perfect languages, are unity of words and sentences, inflections, the distinction of the verb as the centre of union for the sentence, and the development of conjunctions and of the relative pronoun. Now, all these characters seem to be due to one mental quality—the distinct apprehension of relations. Inflections express the relations to each other of the simplest elements into which thought is analyzed, and which are expressed in the individual words. The conjunctions and relative pronoun express the relations to each other of simple facts.* And the distinct expression of these two sets of relations must arise from a corresponding distinctness and strength in the apprehension of them. Moreover, the clear perception of relations gives increased unity to thought and expression; for in apprehending the relation between two objects each is viewed as a whole; and in expressing such a relation each will be so expressed that it will be felt as a unity, in order that the sense of relation may be distinct in passing from one

* The words in a sentence denote things, or the attributes or conditions of things, or the attributes of such conditions of things, thought as constituting a fact, and involving, therefore, a synthesis of thought into concepts of things and concepts of facts. Sentences, moreover, often express general principles, and this is a higher synthesis than the thought of a particular fact. There are thus three degrees of synthesis involved in the development of all thought which language analyzes. First, conception of things, which is a higher synthesis than the mere association of sensations. Secondly, conception of facts, which is a higher synthesis than the association of concepts of things. Thirdly, conception of principles, which is a higher synthesis than association of concepts of facts. Things are perceived in their sensible qualities; facts are perceived in the things which

to the other. Unity of words and of sentences, therefore, follows a strong sense of the relations between what these express, and accompanies the development of inflections, conjunctions, and the relative pronoun, as a simultaneous effect of the same cause to which these are due. And as the verb expresses the essential element of fact which belongs to the sentence, it will be strengthened as the centre of union for the sentence in proportion to the distinctness with which the mind thinks the relations of facts, and, in doing so, concentrates each fact in the verb as in its focus.

The vivid sense of relations is equivalent to general intellectual acuteness; and the power of relative conception seems to correspond to the function of the cerebrum as distinct from those of the sensory organs; but the full development of such power indicates also a vigorous application of the mind to external objects. And in this respect the mental endowments and mental habits of those who have spoken the most perfect languages, those of the Aryan or Indo-Germanic family, correspond exactly with the explanation just given of the distinctive features of those languages. Those races have been foremost in invention and discovery; they have best understood the relations of things and the facts of the world, and have exhibited the highest powers of inference, and the strongest sense of the effects of varied combinations; they have, in fact, manifested the most vivid sense of relations; and their languages present the corresponding features in a proportionate degree. And those whose intellectual inferiority is distinctly marked in their inferior progress exhibit corresponding defects in the languages which they speak; they may have postpositions attached to their nouns, but they have nothing which can be called case-endings; the verb is imperfectly distinguished as the essence of the sentence; they are generally deficient in conjunctions and in a developed rela-

constitute them, and principles are perceived in the facts which are their particular cases. Do these three steps of synthesis correspond to the functions of the three lobes of the cerebrum? The question might be answered by a comparative analysis of the endowments of the lower animals according to the development in their cerebra of the three lobes. Many instances of sagacity, which are interpreted as acts of reasoning in animals, indicate only an association of facts, and therefore imply only a sense of fact, which is a synthesis of the second order. The office of reasoning is to infer a fact from other facts prior to experience, and therefore prior to association; and the inference is made through the medium of a general principle, which is a synthesis of the third order. But Mill confounds reasoning with mere association of facts in his "Logic," vol. i., p. 251, &c.

tive pronoun, and their words and sentences consist of elements which do not cohere in compact unities. The mental quality which would naturally produce those features of excellence in language is present where they are present, and absent where they are absent; and it is therefore natural to infer that it is the cause which has produced them. Its action, indeed, is modified by other mental qualities which may coexist with intellectual acuteness; but the discussion of these would be unsuited to the purpose of the present paper, which is limited to the statement of a few leading principles.

There may, however, be fineness of intellectual power without the exercise of a vivid sense of the external relations of things. The Semitic languages have one mark of excellence in the development of the verb, and they have their conjunctions, and relative pronoun, and unity of words and sentences, yet their verb is developed more in reference to the internal qualities of action and being, than to the external relation of position in time, or the external attribute of objective reality; and in their want of inflections, and in the inferior substitute for these which they employ in altering the vowels of the stem, there appears an inferior sense of the relations of things one to another, and a tendency to incorporate such external relations in the internal nature of things. The Semitic races have always exhibited an inward quality of mind, a tendency rather to thought than to observation; and hence their religious ideas have been remarkable for their strength and depth, while their native art and science were poor. Indeed, the monotony of their native regions did not invite observation, but rather tended to give their active minds an inward direction, leading them to occupy themselves with their own ideas more than with external objects. One is tempted to think that perhaps it was from such a quality of mind, formed by such influences, that the Semitic languages derived their peculiarities. Certainly a mind occupied with external nature sees its objects in connexion with each other, and all distinctly preserving their identity amid the diversity of relations in which they may stand: one which dwells on its own ideas tends to single out that which attracts its attention, losing somewhat of its natural connexions; and the relation which does cling to it blends in thought with the idea itself. The former would probably note strongly external relations, and express them distinctly as external, leaving the stem unaltered. The latter would note them but slightly; and, while observing strongly internal

characteristics, would make even external relations blend with the principal idea and modify its expression. This tendency to incorporate in the stem the expression of the subordinate elements of thought expanded it into a triliteral form; and the mental quality from which this tendency sprang was the formative force which impressed on the Semitic languages their peculiar character.

There is another distinctive feature in which languages differ from each other in large groups, and in respect of which subtle differences exist even among languages of the same family.

If the languages of Northern Asia and of America be compared with those of Africa and Polynesia, the great distinction that will be observed between them is, that the former tend to throw the elements of expression into combinations in which they are thought simultaneously; the latter go through them in succession in their natural order. The former may be called synthetic languages, and the latter analytic; and a similar distinction will be found to exist in a less degree amongst different members of the various families of speech. It must be observed that the synthesis of those Turanian languages is quite different from that unity of words and sentences which distinguishes the languages of the intellectual races. The Aryan and Semitic words are in general perfect unities; even the Aryan compound words, with the exception of the larger Sanskrit formations, express for the most part ideas whose elements are quite fused into one. The sentences in these languages also express single facts, which, though analyzed into their elements, are so put together that they are thought as one. But in the words of the Turanian languages, the elements of which they consist are all felt in their individual significance; and in the sentences of those languages the materials of the fact are given, rather than the single fact itself. There is little more real unity in those languages than in the African and Polynesian, in which the elements of expression, though thought successively, run into and cohere with each other, and in which it is sometimes difficult to distinguish where the words end, and where the sentences end. This imperfect unity arises, as has been said, from a weak sense of relations; and the character of languages with respect to it is to be distinguished from their character as synthetic or analytic, which has, no doubt, been impressed upon them by some other mental quality.

The quality which must, in fact, characterize mental action where a syn-

thetic language is spoken is tenacity of ideas; for this is necessary to synthesis of thought, and there must be synthesis of thought where there is synthesis of expression. The agglutinations of many strong elements into one ponderous word represent thoughts of similar complexity in the mind of the speaker, and raise such thoughts in the mind of the hearer; and, in order to form those thoughts, the earlier elements must be retained till the others are added, that all may be thought together. And the sentences which are constructed of massive parts, that must all be thought together at the end, require that the mind shall keep hold of all the parts till the sentence is concluded. The peculiarities of each language suit the mental habits of those who speak it, and are necessary for those habits; and those who are tenacious of their ideas must gather them into combinations as they pass through them in discourse; and those who move readily from thought to thought cannot carry on their ideas into such combinations.

The synthetic character is to be seen most distinctly in a synthetic arrangement of the words in the sentence. This depends mainly on the principle that that element of a sentence which is relative to another, so that it cannot be fully thought till after that other, shall precede it. Thus, generally, in the synthetic languages the adjective precedes the substantive, and the governed word the governing, the idea which comes first being only partially formed till the mind, retaining hold of it, completes it in conjunction with the other. In the analytic languages the mind goes through its ideas in the order of their independence, the substantive preceding the adjective, and the governing word the governed; and combinations are not formed, because thought passes readily from object to object, and is impatient of half-formed ideas, which must be kept in the mind till they are completed in union with others.

All these distinctive characteristics of the two classes of languages, including the various subtle laws of arrangement of words and of the elements of words, arise from the way in which thought is analyzed, and are to be deduced from the general theory of the mental process of analyzing facts, in order that the action of each mental quality concerned in them may be demonstrated, and the great variety of the phenomena accounted for. But here it must suffice to indicate the general mental quality which corresponds to these phenomena in general, and to prove its presence.

That in those who speak the synthetic languages thought is, in fact, tenacious of its objects, and slow to leave them, while in those who speak the analytic languages it passes readily from object to object, has been partly shown by considering the processes of thought which must take place in those to whom these languages are addressed; but it may also be made apparent by comparing the characters of the two groups of races. These characters differ as widely as the languages; for there can be no more marked distinction than that which separates the slow, brooding Mongolian or American Indian from the quick, impulsive African or Polynesian. The former is deliberate, and tenacious of his purpose; the latter hasty and fickle. The former is slow in forming a new idea, and slow in abandoning one already formed; the latter, ready to give his attention to each new object that attracts it, and to leave that which had just engrossed his interest. Indeed, the character of a nation with respect to this mental quality goes through all its development, and is impressed on all its social life; and the study of the various social phenomena in the two above-mentioned groups of nations would reveal more clearly the more profoundly it was conducted, that, so far as they were dependent on mental character, their great distinctions arose from that same characteristic difference to which the great distinctive features of their languages have been ascribed.

It is more interesting, however, to observe a similar linguistic distinction nearer home, to be accounted for by a similar difference in the action of thought. The German language, compared with the French, furnishes an excellent example of the contrast of the synthetic and analytic existing within the one family of languages. This difference will be more apparent when exhibited in specimens from the two languages; and, that the comparison may be fairly made, we shall take our example from the opening of a philosophical treatise in each language.

HUMBOLDT begins his "Verschiedenheit des Sprachbaues" with the following sentence:—"Die Vertheilung des Menschengeschlechts in Völker und Völkerstämme und die Verschiedenheit seiner Sprachen und Mundarten hängen zwar unmettelbar mit einander zusammen, stehen aber auch in Verbindung und unter Abhängigkeit einer dritten höheren Erscheinung, der Erzeugung menschlicher Geisteskraft in immer neuer und oft gesteigerter Gestaltung." COUSIN begins his treatise "Du Vrai, du Beau, et du Bien" as follows:—"Il

n' y a que deux époques vraiment distinctes dans l'histoire de la philosophie, comme dans celle du monde ; l'époque antique et l'époque moderne. La philosophie Grecque avec ses developpemens et ses révolutions remplit toute la premiere époque ; car nous ne pouvons remonter à une philosophie anterieure qu' à l'aide de renseignemens incomplets, et qu' à force d'hypothese." In these two extracts, consisting of the same number of lines, we have such a picture of the German and of the French mind, that, if we had no other specimen of their productions, we might from these infer the principal lines in their character, and the general features of their national development. The inflections of nouns and verbs, and particularly the marks of grammatical gender, exhibit in both the intellectual acuteness which distinguishes the most gifted races. Those who analyze thought into parts defined with such sharpness of outline, and connected together by such subtle relations, have the endowments necessary for the various kinds of practical skill, and for the creations of science, literature, and art. But, though both are intellectual languages, they differ in the most marked manner with regard to synthesis of thought. The German sentence is equal in length to the three French sentences. As we read it we have to keep all its weighty elements in our mind, that they may unite into one complex whole when we arrive at its conclusion. In the French extract of the same length thought is broken into three parts; and the mind, having thought each part, leaves it to pass to the next. Every member of the German sentence is complex, and the synthesis of thought in one place is increased by separating the two elements of the verb *zusammenhangen*, and inserting four words between them, so as to include them within it. In the French sentences all is comparatively simple, and the parts are light and uncompounded. The German words are large and composite; the French comparatively small, and pure in their meaning. In German the adjective precedes the noun; in French it shows a tendency to follow. In the former, thought dwells with emphasis on its objects, and is slow to leave them, strongly accenting and distinctly pronouncing each word, and joining them all together in intricate construction; in the latter, it passes lightly over its objects, scarcely accenting the words, and pronouncing them imperfectly, while discourse has an open texture, each part being clear of that which has preceded. Does not all this indicate in the German mind a tenacity of its ideas so great as to form its distinctive characteristic as

compared with the French? and is not this, in point of fact, the fundamental distinction between them? In personal habit the Germans are steady, the French, volatile. In civil history the Germans are slow, but persistent; the French, brilliant and changeable. In knowledge the Germans prefer the subjects which demand brooding thought and patient investigation; the French, those which can be thought with ease, and rapidly generalized. The Germans think obscurely, because they cannot easily pass from thought to thought without in some degree mingling the two; and they are, therefore, indistinct in defining their ideas. The French think with transparent clearness, because they pass without confusion from thought to thought, and define their ideas distinctly. In art and literature the Germans elaborate the parts; and, because they cannot pass readily through them, they have a deficient sense of general effect; the French treat the parts with simplicity, and make them all conspire to the effect of the whole. All the distinctive characteristics of the two seem to spring from this one, that the German is tenacious of his ideas, while the Frenchman is quick to leave them; and this is the mental distinction which is impressed on their languages.

It is particularly worthy of notice, that analytic features also distinguish the French language from the Latin, though almost all its materials are Latin; they form a Celtic character, which Gallic speech preserved through a total change of language—a Celtic mould, in which the Gallic mind cast the Latin elements of which French was formed: they are due to a mental character which seems to be still much the same as when it gave to Celtic speech its peculiar features, and which retained its formative power over language when the Romance dialects were coming into existence.

Indeed, the great distinction between the analytic and synthetic languages of the world, in reference to the regions in which they prevail, has perhaps its counterpart in the case of the analytic and synthetic languages of the Aryan family. The Turanian races, as compared with the African and Polynesian, occupy regions which are as diverse as the languages. We might call the regions of the former the cool, and those of the latter the hot; for, though America, which all belongs to the former, has its equatorial regions, they are either on an elevated temperate table-land, or they are cooled by the great forests and swamps about the tributaries of the Orinoco and the Amazon, while Northern America has a climate

like that of North Asia, from which it is probable that it was peopled. Similarly, Germanic language, the most synthetic member of the Aryan family, is the northern one; and the most analytic of the Aryan languages belong to races whose character was probably formed under southern influences. For, if we call to mind the fully developed national life which the Celtic nations had at the time of the earliest accounts of them which have reached us, and how the customs and traditions which constituted it were common to them all, it must be apparent that those customs and traditions were brought from the original seat of the entire race, from which all its members emigrated. The thought which formed these complex elements of national life imparted its character to them, and in them that character was preserved; and the nations who thus fixed the quality of their thought under southern influences speak languages which breathe a southern spirit. The distinctive features of those languages, as compared with the other members of the family, are analytic; and these others were spoken by nations whose national life and national character seem to have been formed in the cooler regions in which they developed their history, the most northern being the most synthetic. In some respects Sanskrit agrees with Celtic in its indications of the quick passage of thought; but there are differences between them, and some apparent contradictions to its being classed as an analytic speech which cannot be discussed here. One indication in Sanskrit of quickness of thought may be mentioned, namely, the great quickness of utterance manifested, just as in Irish, by the phonetic changes caused by the rapid sequence of sounds, and affecting the initial and final letters, because the words ran into each other. And one apparent contradiction to the characters of a quick speech may be noticed—the great Sanskrit compounds, which seem to give it a highly synthetic character. These, however, are not true compounds, but merely words run into each other by dropping their inflections, and melted into one by the haste of thought and utterance, in consequence of which they were thought and expressed imperfectly. And in general Sanskrit seems to be an analytic member of the Aryan family, corresponding in this respect with the locality in which, probably, it was definitely formed.

In the Turanian languages there is not only an intense synthesis, but also a curtailment of expression; so that the elements of speech have stronger meanings, the Mongolian being a silent man compared with the African or

Polynesian. An analytic language in which there was a similar reduction of expression would be monosyllabic; and perhaps it is in this way that we are to look on the monosyllabic languages, as giving somewhat of the analytic character of the Polynesian to the brevity of the Turanian, just as the region in which they are spoken is intermediate between Polynesia and North Asia.

II. The second great division of the science of language investigates the process by which man found expression in his mouth for all that world of thought which is within him, so as to represent all his ideas in audible articulations. In this branch of the science many hypotheses have been formed to explain the origin of language, but it is only through a careful and scientific etymology that any approach can be made to the discovery.

The principal productive cause of each word was the idea which it expressed, for it was the effort to express that idea which originated the word; but it requires careful analysis, and extended comparison carried through all the kindred languages, and it is often a work of the greatest difficulty to ascertain the exact shade of thought which constitutes the radical meaning of a word. It is not till we have ascertained that precise shade of thought that we are in a position to ask why the root was adopted to express it. Nor even then are we to content ourselves with a mere guess at the answer to that question. Language is governed by analogy; and the fitness of a root to express an element of thought was due in a great degree to the kindred meanings of kindred sounds. We must look, therefore, not only to the root itself for the secret of its significance, but to all the roots of kindred form which have kindred signification. Thus we may arrive at abstract combinations of utterance, which pervade classes of roots, and which have in them all a certain significance more abstract than the meaning of any of them. We shall, moreover, find these abstract elements of articulation entering into different classes of roots with slightly varying significance, so as to enable us to abstract from all their varieties of significance an expressiveness more general than these, and nearer to the primitive efforts of speech formation. Thus the words of a family of languages may be classed by their fundamental meanings and their literal elements, so as to furnish two steps of generalization and abstraction. Roots formed out of the same essential literal elements variously modified, and agreeing in the principal element of their signification, may be classed as belonging to a *ground* composed

of those literal elements with that common significance; and *grounds* consisting of the same literal elements, and agreeing in a principal element of their significance, may be classed as belonging to a *base* composed of those literal elements with that common siguificance; and thus the roots may be traced to the simplest efforts of expression, whose natural aptitude to represent thought may be most easily understood. The scientific value of the classification will of course depend on the correctness with which the meanings have been ascertained; and the significance of the grounds and bases can only be regarded as the elements of thought whose expression actually generated the language, on the supposition that the ascertained meanings of the roots, from which the grounds and bases are abstracted, were their original meanings at their formation. The classification itself, however, furnishes evidence in proof of this; for nothing can be more striking than the wonderful permanence which it shows in those fine shades of meaning which constitute the essential radical meanings of words. If this permanence of meaning has existed through these later periods, in which men, having lost the power of originating roots have had to alter more or less the signification of a word already existing, in order to express a new idea, much more must it have characterized language when roots were still coming into existence, and each new idea got an appropriate expression without disturbing the meanings which had been already expressed. The great interest of the investigation, indeed, consists in the light thrown by it on the exact original meanings of the words. And the process of tracing to its source the fitness of the words to express those meanings is, at least with our noble family of languages, like cleaning the pictures of great artists, and bringing out freshly the original colours; for words are pictures of the objects of thought, and the discovery of their exact expressiveness reveals their representative excellence. Nor is the method which has been described to be confined to roots. The formative elements which give to roots their various applications to the concrete objects of thought are to be treated in the same way, and by the investigation of their expressiveness the finest touches are refreshed in those pictures of thought. It is an additional interest that the process promises to lead up towards the origin of language, and suggests an explanation of the original production of roots. And though, as has been said, the value to be attached to any theoretical suggestions of this kind depends altogether on the

soundness of the etymology from which they arise, yet it may perhaps be worth while to state the ideas as to the origin of roots, at least in our family of languages, which have been suggested to the writer by an investigation such as has been described, which embraces at present all the Gothic words, with their Germanic kindred, half of the Greek words, nearly half of the Latin and Sanskrit, and a considerable portion of the Irish, together with all the formative elements and grammatical modifications in Sanskrit, Greek, and Latin, and a large proportion of those of the Germanic languages.

The elements of articulation which give to the Aryan roots their principal significance generally derive their own principal significance from one or other of the parts into which every act of the organs of speech may be analyzed. Every act of the organs of the mouth in speaking consists of a closure of the organ and a jet of breath; and the mind may fix its attention either on the closure, or on the jet of breath, or on the affection of the organ by the jet of breath. But these may be further analyzed according to the following table, in which some of the general ideas naturally expressed by each part are mentioned in connexion with it:—

Closure of the Organ.

1. Its beginning or continuance expresses contact, junction, proximity, position, &c.

2. The opening of it expresses separation, division.

3. Configuration of the organ during closure expresses flexure.

4. Internal condition of the organ during closure, by being made a relaxed condition, expresses relaxation (tension is expressed by 7).

Jet of Breath.

5. Its beginning or continuance expresses motion, activity, &c.

6. Its end expresses cessation of motion or activity, removal.

Affection of the Organ by the Jet of Breath.

7. Its beginning, the breath pressing on the organ, or just issuing through it, expresses impact, pressure, resistance, force, expansion or growth, sudden motion.

8. Its continuance expresses friction, penetration, fracture, irregular motion expressed by vibration of the organ.

The expressiveness of the vowels comes principally in 5 and 6 from the character of the jet of breath; but they have also an expressiveness in all the other numbers, in proportion as they require a partial closure of the organs to sound them. The expressiveness of the consonants is scarcely affected by their position in the mouth as gutturals, palatals, dentals, or labials; still less by the degree of closure with which they are sounded as tenues, medials, or aspirates. It is the nature of the muscular act of uttering them which gives to some of them a distinctive expressiveness in each of the parts into which that utterance is analyzed. Those, in sounding which there is little muscular tension, as *j*, *r*, *l*, *n*, *m*, *v*, are peculiarly apt to express gentle contact in 1; relaxation in 4; undirected or unimpeded motion in 5; yielding to pressure, or pressure of what yields, in 7; and some of them irregular motion in 8; *r* and *l*, owing to the flexibility of the tongue in uttering them, are specially apt to express flexure in 3, and irregular motion in 8, *r* also, owing to the vibration of the tongue, sometimes giving a sense of succession of parts; *m*, *n*, and *v* or *w*, are also apt to express flexure in 3, because in *m* and *n* the organs are so quiescent that their simple position becomes a prominent object of attention, and because in sounding *w* the mouth is felt as a closing cavity; *v* and *m* seem to have in 1 a peculiar expressiveness of juxtaposition of like or doubling, arising from the simple apposition of the two lips; *m* and *n* seem to have in 1 an expressiveness of indefinite position or indication, owing to the absence of a defined muscular action; and *n* in 8 a peculiar sense of unimpeded penetration, owing to the breath being unimpeded. The consonants which enter into a root express, for the most part, in the same number; but if there be more than two, the third may be in a different number.

Besides roots formed on the above principles, there are others formed on the following principles, but these constitute an inconsiderable part of Aryan language:—All objects of thought of which the principal element is conceived to be an action of the mouth or the breath are denoted by articulations which imitate the action of the mouth, or furnish a representative jet of breath; to the latter belong the ideas of spirit, mental action, personality. All those whose principal element is a sound are represented by imitating the sound, the imitation being often produced by an articulation which gives to the organ a sensation similar to that which the sound gives to the ear. All those which naturally

prompt an interjection are denoted by articulations of a corresponding interjectional nature.

These theoretical ideas were suggested by the purely inductive process of a careful etymology; but a general observation confirmatory of them may be added in conclusion.

It is evident, from the scanty development of the vowels compared with the consonants, particularly in the early languages, as Sanskrit and Hebrew, and from the minor elements of thought which the vowels convey, that the expressiveness of speech lies in the consonants, and comes from what they have as distinguished from the vowels. Now, it is in the vowels that the sound of the voice is; in the consonants are the muscular actions of articulation; and the natural inference is, that, as these muscular actions are the distinctive essence of the consonants, it was in these that man found the means of expression and the representatives of thought. It was not, however, the difference of consonants which principally furnished him with the means of various expression; for the same combinations of consonants, sometimes with the same vowel, form roots expressing totally different ideas, while consonants sounded with different organs form roots which express ideas almost or altogether identical. If, then, it was in the muscular action of consonant-utterance that various expression was found, and yet not principally in the diversity of consonants, it must have been in the act of uttering each consonant that the principal distinctions of expression were furnished, and in an analysis of that act into its principal parts. Perhaps it may be thought that the analysis given does really distinguish those parts which are most fit to engage the attention of the mind.

ART. V.—*On the Rudiments of the Common Law discoverable in the published Portion of the Senchus Mor.* *By* SAMUEL FERGUSON, *Q. C., LL. D.*

[Read February 11, 1867.]

A MARKED indisposition has at all times prevailed amongst English jurists against accepting any element of the social constitution of Britain from the Britons themselves. Whatever portions of the common customs of the realm cannot be traced to an origin in the Roman Law have generally, with more or less of confidence, been referred to an Anglo-Saxon origin;* and, where analogies were not easily to be found in the codes of the northern nations, recourse has occasionally been had to the theory of social development and spontaneous evolution.† This aversion from reliance on native sources is doubtless owing in some measure to the repulsive picture of ancient British manners drawn by Cæsar, and to the generally en-

* Speaking of the striking uniformity of laws and institutions which prevailed throughout Europe at the close of the tenth century, Mr. SPENCE observes that it may be more satisfactorily accounted for by considering the habits and conditions of the dignified clergy, and their relation to the rest of the community, "than by simply tracing it to the ancient institutions and customs of the German tribes, which, from a kind of patriotic feeling, has been very much the habit with the most distinguished of our lawyers and historians," referring to, amongst others, Spelman, Gloss., 217 a; Sir M. Hale; Robertson; and Sir Wm. Blackstone ("Eq. Jurisd.," vol. i., p. 13). This eminent writer goes further than most of his contemporaries in admitting that to some extent British customs must have been recognised by the Anglo-Saxons: "The conquerors were almost compelled to adopt, to some extent at least, the institutions of the conquered, or they would have had to construct a system of jurisprudence from the very foundations; for here (i. e. in the new modifications of property consequent on their advent) they had no customs purely their own to embody or enforce" (Ibid., p. 11); and exhibits a great respect for the views of WHITAKER.

† See observations of Mr. Knight, "Pop. Hist. Eng.," vol. i., pp. 116–7; citing Kemble, "Saxons in England."

tertained belief that the British and kindred Celtic institutions have continued to exist only in dependencies on England proper.

The publication of the Welsh Laws of Howel the Good, in 1750, threw for a time new light on the neglected native field of inquiry. The learned and acute WHITAKER—to whom GIBBON has offered the signal compliment of declaring that "the particular historian of Manchester embraces, under that obscure title, a subject almost as extensive as the general history of England"—was the first to seize on the numerous points of resemblance between these British institutions and those commonly ascribed to Anglo-Saxon and Norman introduction. He observed that the Hundred, supposed to have been devised by Alfred only half a century before, had appeared here as an institution of immemorial antiquity, under the equivalent British name of the *Cantref*. The Cantref Courts and Courts of the Welsh Commot appeared to him to be the equivalents of the Hundred Courts and Courts Baron of the Anglo-Saxon and Norman system; the portions of each territory held by the population in *Gavelkind* seemed to him to correspond with the *Folkland* of the Anglo-Saxon manor; and, observing that rents were paid and services rendered by Welsh tenants for lands liable, or which seemed to him to be liable, to heriots, reliefs, homage, wardship, marriage licenses, and escheats, he conceived that this could be nothing but a rudimentary feudal tenure, and that the origin of British feuds, no less than of British manors, might as well be looked for in Britain itself as elsewhere.*

The existence of evident traces of manorial jurisdiction, and of an incipient feudal polity, in the Laws of Howel (an undoubted work of the early half of the tenth century), could not be denied; but, in the point of view to which British jurists have been inclined, might be accounted for; and the force of WHITAKER's reasoning has been avoided, and his conclusions cast aside on the suggestion, eagerly snatched at by successive writers, that HOWEL probably derived his system from the neighbouring Anglo-Saxon kings, at whose courts he appears to have been occasionally a guest.†

* "History of Manchester," book i., c. viii. "Even Gibbon's commendations have not preserved this very learned work from falling almost into oblivion" (Spence, "Eq. Jurisd.," vol. i., p. 212).

† "It must be remembered that the British princes became the homagers of the Kings of

In this state of cultivated opinion, it is not surprising that the aids which possibly might be drawn from Irish sources have been disregarded; or, if adverted to, passed by as worthless. On the authority of a loose assertion by SPENSER, it was generally taken for granted that whatever the Irish Brehons possessed worthy of the name of law was in truth but a travestie of the Civil Law brought in by their clergy. Sir RICHARD COX, our best historian, would not admit that the Irish possessed written laws at all;* and Mr. HALLAM—who may be taken as representing the latest and most matured judgment of cultivated English opinion—arrives at the conclusion that probably such resemblances as exist between the Brehon system and the mediæval codes of Europe arose from the degenerate Anglo-Norman families having imported the

England, at least as early as the days of Alfred; they paid tribute to Edward the Elder, Athelstane, and Edgar. The tribute, which is described to be of old standing, is expressly mentioned in the laws of Howel Dda; and a payment in the nature of a relief was paid by each sovereign prince on his accession, each of whom exacted a similar payment from his dependents (Palgrave, "Rise," &c., 458, 459, ccxii.). Howel and others of the British princes are frequently found at the courts of the English kings, particularly of Athelstan (at Luton, A. D. 931; at Dorchester, A. D. 938; Palg. ccxlvi.-vii. et v. ccxliv.). The laws of Howel Dda, in which the traces of feudalism are to be found, were compiled by a joint commission of clerics and laics; and then Howel, three bishops, and some others, making together thirteen, went to Rome, some time between 914 and 944, (Pref. to "Anc. Laws"), to obtain for them the sanction of the Pope. There is internal evidence ("Anc. Laws of Wales," i., 207) that the Roman Law was consulted in their compilation (ib., p. 423, ii., 840), so that we may well account for the laws of Howel Dda containing traces of the customs which then prevailed throughout Europe, without assuming that they were of British original" (Spence, "Eq. Jurisd.," vol. i., p. 302).

* "There was no written law; no digested or well compiled rule of right: no; it was only the will of their brehon or lord." "The manner of deciding controversies was equally ridiculous with the law they judged by, without clerks, registries, or records." "We may be sure that some of these hereditary judges and doctors were very sad tools, and perhaps all of them will justly fall under suspicion, unless their advocates can show some ancient learned tracts on law or physick which might remain as monuments on record" (Apparatus to "Hib. Angl."). Not to speak of medical tracts, of which there is a large number, Thaddeus Roddy, a gentleman of Leitrim, who lived into the beginning of the last century, states, "I have thirty books of our law. My honoured friend Sir Richard Cox was once of opinion that our law was arbitrary, and not fixed or written, till I satisfied him to the contrary in the summer of 1699, by showing him some of these old law books;" yet Sir Richard never appears to have taken any step to rectify this material error.

traditions of a superior civilization into the native customs to which they conformed.*

Some apology may be found for such misapprehensions in the imperfect character of the portions of the Brehon Law made public by VALLANCEY. These were fragmentary and uncertain in the text, and doubtful in the translation, and had the misfortune of being given to the world in company with philological and ethnological speculations which have been generally condemned by men of learning. Mr. O'REILLY, however, resumed the subject on a more extended scale, and with more of method, in the "Transactions of the Royal Irish Academy;"† and from these, and other collections subsequently accumulated by that learned body, sufficient material was found to enable the writer of this paper, in the year 1836, in the article "Brehon Law," in Knight's "Cyclopedia," to realize to some extent, though doubtless in a very imperfect way, the general framework of the Irish social institution. This he imagined greatly to resemble the early English manorial system, as it at first shows itself in the dawn of Anglo-Saxon history, with its personal distinctions of lord and tenant, freeholder and villein, and its territorial divisions of thane land and folkland. But whether these were original institutions, or borrowed, there existed at that time no sufficient materials accessible to the ordinary inquirer for determining. The extent and value of the material having, however, become better known, and a reasonable prospect appearing of its age being ascertainable by internal evidence, two eminent members of the Academy, who have both filled the Presidential Chair, in the year 1852 submitted to the Irish Government a project for the transcription and translation of the Irish Brehon Laws. On their recommendation a Commission issued on the 11th November, 1852, directed to the Lord Chancellor, and other eminent judicial and learned persons, authorizing the employment of transcribers and translators of such parts of the ancient Laws and Institutes of Ireland as they should think fit; the first fruits of which Commission are now before the public.‡

* "Hist. Eng.," vol. iii., p. 341, n.

† "Trans. R. I. A.," vol. xiv.; Antiq., p. 141.

‡ "Ancient Laws of Ireland. *Senchus Mor:* Introduction to Senchus Mor and Athgabhail, or Law of Distress, as contained in the Harleian MSS.; published under direction of the Commission

The scholars on whose knowledge of the original texts the Commissioners relied were the late Dr. O'DONOVAN, and Professor O'CURRY, both of whom had received a careful archæological training under the eye of the late Dr. PETRIE, in the now celebrated School of the Ordnance Survey Memoir. The task assigned them was one of extreme difficulty, arising not only from the archaic forms of the language, the meaning of which had often to be approached through the medium of gloss upon gloss, but from the special and technical nature of the terms of art employed. As they proceeded, however, in their work, the frequent recurrence of terms and phrases in different contexts afforded means of arriving generally at the substance of the meaning; and from the glossaries so formed, as well as from special MS. glossaries to which they had access, especially the *Sanas Cormaic* and Law Glossary of O'DAVORAN, which were given to the public during the course of their labours by Mr. STOKES,* the present translation has been produced.

The portion which has been published comprises that part of the tract called *Senchus Mor*, which treats of the proceeding by *Athgabhail*, rendered "distress." The *Senchus Mor* is traditionally ascribed to the time of St. Patrick, who, in this exemplar, is said to have assisted in its compilation at Tara, in the ninth year after his arrival in Ireland; that is, about A. D. 441. Other copies, however, refer the work to the time of Cormac Mac Art, 200 years earlier; and it is obvious that its age must be judged of by some other criteria than its own assertions.

The text consists of what may be conveniently designated the original text, the medial text, which sometimes assumes the form of text, and sometimes of gloss; and of a second, and occasionally even of a third gloss. Enough of time had elapsed between the formation of the original text and the first gloss to admit of the growth of doubtful constructions. In numerous instances the first gloss offers a series of hypothetical conjec-

for publishing the Ancient Laws and Institutes of Ireland," vol. i. Dublin: Alexander Thom. London: Longman & Co., 1865.

* "Three Irish Glossaries: Cormac's Glossary, Codex A. (from a Manuscript in the Library of the Royal Irish Academy); O'Davoran's Glossary (from a Manuscript in the Library of the British Museum); and a Glossary to the Calendar of Ængus the Culdee (from a Manuscript in the Library of Trin. Coll. Dub.) with a Preface and Index, by W. S." London: Williams and Norgate, 1862.

tures as to the meaning of the original; and the secondary gloss proposes similar alternative constructions of the first: obviously it must have taken a great lapse of time to have induced so much obscurity since the first promulgation of the original text.

Now, both this first gloss and the original text are referred to as existing records in Cormac's "Glossary;"* and that tract itself is referred on internal philological evidence† to a period not later than the tenth or beginning of the eleventh century, if it be not of the age of the king-bishop whose name it bears, that is, of the ninth. Another argument of the high antiquity as well of the original text as of both glosses may be drawn from an interjectional entry by the penman of the second gloss (page 300), invoking a blessing on the soul of Fethgna; for it appears that the only noted person of that name was an Abbot of Armagh, eminent for his piety, whose death is recorded in the Annals at A. D. 872; and the entry has the air of having been made while his memory was fresh in the recollection of the scribe. Again, it is observable that the names of several minor kingships, which do not appear in the "Book of Rights," and may therefore be supposed to have been absorbed into larger territories before the composition of that work (also ascribed to the ninth century),‡ are mentioned in the medial text as existing separate jurisdictions. It would seem reasonable to conclude from these considerations that, coeval with the period of Alfred, the *Senchus Mor*, at least in its original text and portions of its glosses, existed as a substantive work amongst the Irish, laying claim even then to a considerable antiquity. The internal evidence afforded by the work itself is also of a persuasive kind. If the institutions which it treats of had been borrowed, it would probably

* *Sub. voc.* "*Athgabhail*" ("Three Gloss.," p. 4.); "*Flaith*" (19); *ut est isint* [S]enchas Már, .ı. *flaith* [.ı. ?] *laith find fortellraig* .ı. *ass nambo for talmain*—where the original text and first gloss are cited together. See also *Ferb.* (19), *Gno* (24), and *Ness* (23).

† On a careful consideration of the forms of the language, Mr. STOKES concludes that "the greater part of what is commonly called Cormac's Glossary was written, if not in the time of Cormac, at least in a century or so after his death," A. D. 906 ("Three Gloss.," Pref., xviii.).

‡ "*Leabhar na G'ceart;* or, the Book of Rights, with Translation and Notes, by John O'Donovan, M. R. I. A., Dublin; printed for the Celtic Society, 1847;" in the Preface to which, p. viii., Dr. O'DONOVAN arrives at the conclusion that the older "Book of Rights," ascribed to St. Benignus, was in existence in the time of Cormac of Cashel. The territories referred to are Ciarraighe Cuirche (Kerrycurrihy), in Kerry, and Crumthann (Cruffon) supposed in Galway.

have adopted the legal terminology, as well as the laws of the lenders, as we may observe the Irish to have done in a remarkable manner in other sciences. But in the multitude of technical terms descriptive of the persons and interests of the litigants, and of the processes of the judicature, not more than two or three are to be found having their verbal equivalents in any other European code known to the writer.

Writing is nowhere mentioned as incident to any of the processes of litigation. Save in a few instances where ascertained wages are made payable by the *screapall* and *pinginn*, all the measures of value are denominated in cattle, or equivalents of cattle, just as personal mulcts were estimated in Germany in the days of Tacitus.* These characteristics argue an origin anterior to the codes which affix money values to legal liabilities. But, if we except the fragmentary remains of the Gaelic law of Scotland,† this definition will be found to include all the known continental and insular *Leges Barbarorum.*

Add to this the practice of the claimant fasting against his debtor till the latter should give satisfaction to abide the result of a suit—a proceeding seemingly lost from all the European systems, although still in use, as pointed out in Dr. HANCOCK's preface, in some part of India; and the further fact, noticed by Dr. GRAVES, that portions of the original text are strung together in a rude metrical form, as if for the purpose of more easy oral tradition, and it will be admitted that everything is consistent with the primitive and remote period to which the work refers itself. It may also be observed that the work, unlike any of the known European collections, is prefaced by a cosmogony, agreeably to the practice of the compilers of Oriental codes. On these grounds it may be assumed that the *Senchus Mor* presents us with the fragments of a system of laws in the main unmodified by Anglo-Saxon, Danish, or Norman influences; and that such rudiments of the Common Law as these may contain, unless referrible to a Roman origin, may be presumed to be at least the common property of the insular Celts and their conquerors, if not to some extent an adap-

* "Luitur enim etiam homicidium certo armentorum et pecorum numero, recipitque satisfactionem universa domus" ("Germ.," c. 21.).

† "Reg. Mag.," c. 36. "De *cro*, id est, singulorum capitum æstimatione. Statuit dominus rex quod ille *cro* unius comitis Scotiæ est septies viginti vaccæ, tres oræ pro vacca," &c.

tation by the latter of institutions found already existing on their arrival, and altered only by the imposition of Germanic names.

That there should not be traces of the Civil Law in a code which was at least systematized by the Christian clergy, would be unreasonable to suppose; and it would be equally unreasonable to assume that resemblances of primitive customs should not be found in all parts of Western Europe. As regards these latter, if we shall find, for example, that the *ager publicus* of the early Romans bears a certain likeness to the *Folk-Land* of the Anglo-Saxons, and that again to the *Fecht-Finne* or tribe land, of the Irish; that the Roman Decennary and Century are reflected in the Saxon Tithing and Hundred; or that the commencement of particular actions in Roman law *per pignoris capionem* bears a certain analogy to the Celtic proceeding by distress,* the reasonable inference would be, that these are everywhere the remains of a parent system at some period common to the west of Europe, and that they are as little derived by us from Rome as by the Romans from us.

Coincidences with the Civil Law stand on a different footing. Where they exist, they are traceable to patent sources, and may be referred without hesitation to their proper authors. But, in point of fact, outside what concerns the Church, they are hardly found to exist at all in this compilation; and the *Sanas Cormaic* furnishes evidence of a kind wholly free from suspicion, that

* "Per pignoris captionem lege agebatur de quibusdam rebus moribus (de) quibusdam lege. § 27. Introducta est moribus rei militaris, nam propter stipendium licebat militi ab eo qui distribuebat nisi daret, pignus capere (æs militare), item propter eam pecuniam licebat pignus capere ex qua equus emendus erat (æs equestre), item propter eam pecuniam ex qua hordeum erat comparandum (æs hordiarium), §. 28. Lege autem introducta est pignoris captio velut lege XII. Tabulorum adversus eum qui hostiam emisset nec pretium redderet; item adversus eum qui mercedem non redderet pro eo jumento quod quis ideo locasset ut inde pecuniam acceptam in dapem id est in sacrificium impenderet. Item lege data est pignoris captio publicanis vectigalium publicum populi Romani adversus eos qui aliqua lege vectigalia deberent" (Gaii Com. iv., § 26, et seq.). From the limited and exceptional character of the proceeding (Ortolan, "Explic. Hist. des Instit.," vol. iii., p. 504), it would appear rather to have been a remnant of some more general and primitive custom, limited by law to the particular cases enumerated, than a newly invented method given in those special instances. The old *actio* of the Romans (of which this was one) had given way to the course of proceeding by *formula* before A. D. 160 (Gaii Com. Ed. Klenz. et Bocking); so that the Irish method cannot well be supposed to have been derived from the Roman Law of the Christian missionaries.

even the law of the Twelve Tables was regarded as something extraneous by the Irish, at a time when it was to some extent adopted in Britain. This appears from a legend of considerable interest, the main incident in which turns on the law of damage done by animals. It is said that Solon, when he reformed the severe code of Draco, first introduced at Athens a law of compensation for damage received from beasts :—" A dog that had bit a man was to be delivered up, bound to a log of four cubits long ; an agreeable contrivance," says Plutarch, " for security against such an animal." Whatever may be thought of Solon's being the first originator of what may seem an elementary part of the law of damages, it is certain that this, with other laws sanctioned by his name, was imported into the Roman Tables, the seventh of which, by its first law, provides—" *Si quadrupes pauperiem faxit dominus noxiæ æstimam offerto ; si nolet quod noxit dato ;*" and "*pauperies*" here is defined " *damnum sine injuria facientis datum, nec enim potest animal injuriam fecisse, quod sensu caret.*"* This law has usually been read as giving the option to the owner of the animal of either paying the estimated amount of the damage, or giving up the beast in satisfaction ; but it would appear that in Britain, at the time of the story about to be referred to, is was understood as giving the option to the complainant of either accepting the offered compensation, or having the beast itself. The tale is found in the *Sanas Cormaic*, under the heading *Mug eime*, and professes to relate the stratagem by which Coirpre Musc, son of Conary Mor, in the third century, obtained the first *orcne*, or lapdog, ever brought to Ireland. It has been translated by Mr. STOKES, who points attention to some of its archaic grammatical forms ; and, so far as it bears on this inquiry, is as follows :—

" *Mug-eime*, the name of the first lapdog that was in Ireland. Coirpre Musc, son of Conaire [it is from him the district of Muskerry took its name] brought it from the East, from Britain. . . . Coirpre was paying a visit in the East to his family and his friends. At that time a lapdog had never come into the land of Erin : the Britons forbade that one should be given to the Gael for asking, or through free will, or through gratitude or friendship for the Gael. At that time the Britons had a law, to wit, ' *Cach bidba inachinta do neoch nofuasnabad cáin*' that is, ' Every [fourfooted] criminal for his crime who shall break the law.' There was a beautiful lapdog in the possession of a friend of Coirpre Musc's, in Britain ; and Coirpre got it from him [thus]. Once Coirpre went to his house, and great welcome

* Pothier, " Pand.," vol. i., p. 8, c. cxviii.

was made to him, except concerning the lapdog. Coirpre Musc had a splendid dagger, with ornamentation of silver and gold on its hilt: it was a marvellous treasure. Now, Coirpre put a great deal of grease about it, and rubbed fat on its hilt, and then left it before the lapdog. The lapdog took to gnawing the hilt till morning. It wounded [injured] the dagger then, so that it was not lovely. Next day Coirpre made a great complaint of this, and was seemingly mournful [or wrathful] about it, and demanded justice for it from his friend. 'That is fair;' and he said, 'I will pay for the crime,' said he. Said Coirpre, 'I will take nothing but what is in the Briton's law, namely, *cach rob ina chin;* that is, "every criminal (*recte* beast) for its crime."' So then the lapdog was given to Coirpre; and the name clove to it, namely, *Mug-éime*, 'slave of the hilt;' *Mug*, that is, a slave that was given on account of the hilt. The lapdog, which was a bitch, was with young. . . . In that way there descends every lapdog (*orene*) still in Ireland."*

Other examples of such differences in analogous Roman and Irish law as are inconsistent with the loan theory will occur further on.

This process of *athgabhail*, rendered "distress" by the translators, forms the subject of the volume which has been published by the Commissioners. The primary meaning of the word *gabhail* appears to be a taking or seizing, and the root seems plainly to be of the same growth with *capio*. Under the forms *gauel*, and *auael*, and *adauael*, it is found in the Welsh laws, apparently in the same sense as in the Irish. In its secondary sense it appears to have been applied to rents, services, duties, imposts, and taxes, of which the common quality is, that they are all leviable by distress. For these DUCANGE may be consulted under the various heads of *gablum*, *gaulum*, *gabulum*, *gablagium*, *gabella*, *gabellum*, *gabena*, and *hagabulum*, which latter is in form the same with the *athgabhail* of the Irish, and is drawn from an early English record in DUGDALE.† The only instance in which the word seems to be applied to the distress itself is

* "Three Gloss.," pref. xlviii. That *rob*, in the second statement of the law, means a beast or fourfooted animal, appears not only from other parts of the *Sanas Cormaic* (title *rop*, *rap*), but from the curious and careful provisions of the *Senchus Mor* with respect to compensation for injuries caused by beasts and petted animals; and here it must be owned the Irish law is an improvement on the Roman one. It prescribes a three-day process for compensation for injuries done by pet animals; and provides (p. 160) that if the beast (*rop*) be fit for food, and if its own value is sufficient to pay for the trespass, it shall be forfeited; but when it is a beast not eatable, or, being eatable, if its own value is not sufficient to pay for its trespass, then the injured party may enforce his demand by *athgabhail*.

† "Mon. Angl.," t. ii., p. 32. "Habent et dicti canonici, 50 acras terræ in lib' el' salvo *hagabulo* Dom. Reg." occurrit ibi semel et iterum." Spelm. "Gloss.," *in verb.*

found in Madox ("Formulare Anglicanum," p. 313) :—"*Sciatis quod nos concessimus abbati et conventui de Brueria allocare et elongare gabulum bovinæ suæ.*"*

Four species of *gabhail* are enumerated in the *Senchus Mor*, viz., of dead chattels, of live chattels, of men, and of land. Distress of live cattle is the subject principally treated of. Between persons of certain rank this appears to have been the universal mode of enforcing demands of every kind. The process is thus summarized in the preface to the Commissioners' volume, and it may be observed that the statements in the summary appear to be fully borne out by the text:—

"The plaintiff or creditor, having first given the proper notice, proceeded, in the case of a defendant or debtor not of chieftain grade, to distrain. If the defendant or debtor were a person of chieftain grade, it was necessary not only to give notice, but also to 'fast upon him.' This fasting upon him consisted in going to his residence, and waiting there for a certain time without food. If the plaintiff did not, within a certain time, receive satisfaction for his claim, or a pledge therefor, he forthwith, accompanied by a law agent, witnesses, and others, seized his distress. The distress when seized was, in certain cases, liable to a stay ('anadh'), which was a period varying according to fixed rules, during which the debtor received back the distress, and retained it in his own keeping, the creditor having a lien on it. Such a distress is ('athgabhail ar fut') a 'distress with time;' but under certain circumstances, and in particular cases, an 'immediate distress' ('tul athgabhail') was made, the peculiarity of which was, that during the fixed period of the stay the distress was not allowed to remain in the debtor's possession, but in that of the creditor, or in one of the recognised greens or pounds.

"If the debt was not paid by the end of the stay, the creditor took away the distress, and put it in a pound. He then served notice of the distress on the debtor whom he had distrained, letting him know where what was distrained was impounded. The distress re-

* In the form of *gavel* it enters, as we are all aware, into the description of that peculiar tenure called *gavelkind;* and in its secondary sense of duty, or *redditus*, appears in a great number of forms descriptive of duties imposed on tenants by this kind of tenure, such as *gavelrip*, or duty shearing, *gavelmed*, duty mowing, &c., &c. The old derivation of gavelkind, *gyve-al-kinde*, has long been given up; but it is still uncertain how the word is to be understood etymologically. WHITAKER took *gavel* in this composition to signify estate or interest; and, conceiving *kind* to be the British *cinead*, read it as "family estate." *Gavel* certainly appears in the Welsh laws in the meaning of possession, and perhaps the expression "to hold in sons'-take" would be as close a rendering of the *habendum in gavel-kinde* as the English language now admits of.

mained in the pound a certain period, fixed according to its nature ('dithim,' translated 'delay in pound,' is the name of this period); and the expense of feeding and tending ran against the distress, and was payable out of it for this period. At the end of the delay in pound the forfeiting time ('lobadh') began to run, during which the distress became forfeited at the rate of three 'seds' per day, until entirely forfeited. If the entire value of the distress thus forfeited was exactly equal to the original debt and the subsequent expenses, the debt was liquidated : if it was less than this, a second distress was taken for the difference ; and if more, the overplus was returned. All this proceeding was managed by the party himself, or his law agent, with the several witnesses of the various steps, and other necessary parties.

"But if, instead of allowing his cattle to go to pound, the debtor gave a sufficient pledge ('gell')—*e. g.* his son, or some article of value—to the creditor that he would within a certain time try the right to the distress by law, the creditor was bound to receive such pledge. If he did not go to law, as he so undertook, the pledge became forfeited for the original debt.

"At any time up to the end of the 'dithim' the debtor could recover his cattle by paying the debt, and such expenses as had been incurred. But if he neglected to redeem them until the 'dithim' had expired, then he could only redeem such of them as were still unforfeited" (*Senchus Mor, Preface*, xlvi. *et seq.*).

Some observations here present themselves—first on certain apparent differences from, and secondly on certain analogies to, the course of the Common Law as it has come down to us. As introductory to these, a remark of the learned historian of the English Law may here be usefully premised :—

"'We possess,' says Mr. REEVES, 'many of the Acts of Parliament from Magna Charta, 9 Henry III., to the time of Edward III.; and from thence, in a regular series, to the present time. The statutes, except some very few, enacted by the legislature before that period, are lost, though no doubt many of the regulations made by them, having blended themselves with the custom of the realm, have been received under that denomination, since the evidence of their Parliamentary origin is destroyed."*

The first seeming anomaly to be observed on is the liability of the cattle to become forfeited for the debt in the hands of the distrainer; for it is the received opinion that at Common Law the distress could not be sold, or otherwise converted to the distrainer's use. But the right to sell distresses taken for fines and amerciaments has always existed; and in proceeding by at-

* Reeves' "History of the English Law," vol. i., p. 1.

tachment, according to the early Common Law process, the goods attached seem to have become forfeited in default of the defendant's appearance.* These seem rather remnants of a more extensive system, contracted by lost legislation, than exceptional provisions engrafted on a different custom. And, in fact, the existence of the right to sell the distress is expressly recognised in the Scottish Statute Law of the fourteenth century,† and cannot well be supposed to have been unknown in the sister kingdom. It is difficult to suppose that the course of taking the goods for the debt known to the Roman Law,‡ and offering a simple and speedy mode of satisfying the distrainer's claim, should not have been practised in Britain; and it is a fact not unworthy of notice, that our own legislature in Ireland had recourse to the same method, being in truth a re-enactment of the old native custom of the country for satisfying arrears of rent, as far back as the 18 Edward IV., by an Act passed in which year, chapter i., it is provided :—

"If the distress be not redeemed within eight days after the taking, it shall be lawful for the lord to appraise the distress by four men of the same lordship; and if he from whom the distress is taken do not within other eight days pay, &c., then the lord to take the distress as appraised for his rent with his damages; and if the distress be better than the rent, with the arrears, the lord to restore the surplus to the tenant; and if the distress be of lesser price than the rent, the tenant to pay the surplus, or be again distrained."§

* Bac. "Abr.," Distress, G. "The lord may sell the distress taken for an amerciament in leet, as the king may sell the distress, for that it is in the king's court" (Kitchen "On Courts," 87). "Attachment in court baron upon debt, or trespass, or in any other action; it seems that he shall forfeit the thing attached upon default. If the sheriff attach a cow, the property is not out of the defendant till he make default on the return of that; and if the sheriff leave the cow attached with the defendant, yet if he make default, it is forfeit to the king, and the sheriff may take it with him at first if he will" (*Ibid.*, 157).

† "Statutum est quod nami vel aliæ districtiones factæ pro debito regis aut per aliquam aliam occasionem nullo modo vendi debeant infra quadraginta dies a die captionis computandos." Stat. 2 Rob. I., c. ii., "Leges Bar. Scot."

‡ "Ordo rei gestæ et mora solutionis quæ intercessit constantius desiderat remedium. Si itaque Præsidem provinciæ, qui rem judicatam exequi debet, adieris, et allegaveris res soli, quæ *pignori* datæ sunt, diu subhastatas, ex compacto seu ambitione diversæ partis emptorem non invenire [potuisse] in possessionem eorum te mittet, ut [vel] hoc remedio res tamdiu protracta, ad effectum perducatur. ("Codex," l. vii., tit. liii., l. 3). Adopted in principle in the statutes of *Acton Burnel* and *de Mercatoribus*.

§ The same legislature had, but two years before, described the system from which this enact-

These considerations tend to the conclusion that whatever distinction exists between the English Common Law and a system in which the distrainer could apply the distress in satisfaction of his demand is probably more the result of time than of a difference of origin.

The next remark which will probably occur to the mind of the legal reader is, that the expense of feeding and tending accumulates on the impounded distress under the Brehon system, whereas we are in the habit of receiving it for the Common Law of England that, "if a man distrains cattle, and puts them into a pound overt, the owner ought to keep them at his peril, for it is lawful for him to come there for this purpose; but if put in a pound covert, or close, then the distrainer ought to keep them at his peril, yet he shall not have any satisfaction for it."* But, in truth, the old Common Law of England was similar to the Irish law in this respect, as appears from the Statute, 51st Henry III., enacting that the owner shall not pay for keeping the cattle, but may feed them himself;† whence we may collect that, before the passing of that Statute, the owner was chargeable with their keep, as he appears to have been in the Brehon system.

Another seeming anomaly will be noticed. At present, almost the only case in which a private person can so far take the law into his own hands as to distrain is the case of rent in arrear; and it will have been observed that under the Irish system the plaintiff himself might take a distress, not only for rent, but for all other demands. But it must be borne in mind that the remedy by distress was by no means confined to an action for rent or services: it formed part of the process in commencing all personal actions. We find in BRACTON that cases of litigated distress (*Vetitum namium*) might arise in actions both of debt and trespass;‡ and at the time of the enactment called the

ment is borrowed as wicked and damnable, in an Act providing for the election of the sheriff of Waterford by the burgesses, which recites that in all the countries round about the said city "there live no lords governed by the king's laws, but only by the wicked and damnable law called Brehon law." (Hard. "Stat. Kilk;" "Trans. Ir. Archælog. Soc.," p. 18, citing unpublished Stat. of 16th Edw. IV.); and see "Stat. Kilk.;" 40th Edw. III., s. 4, "que par raison ne doit estre nome lei eins malveis custume."

* Bac. "Abr.," Distress, D. † Cited 9 Vin., "Ab.," 160.

‡ The questions arising in plea of *vetitum namium* related either to the caption or detention. If the things justly taken were detained against *gage and pledge*, after security was offered for

Quoniam Attachiamenta in Scotland, the "poynding" or distraining the defendant's cattle was the usual course of commencing all actions of *urrang* and *unlauch*, as well as of debt and covenant.* The first legislative restriction on this general right of attachment in Scotland appears to have been by the Statute 2nd Robert I., chapter 15, enacting that distresses should not be taken without the judgment of the court.† In England the mischiefs of an unrestricted use of the right to take *nam*, as it is called in the Anglo-Saxon Law, had been earlier felt, and in part remedied by the Law of Canute, by which it is provided, "Let no man take any *nam*, either in the shire or out of the shire, before he has thrice demanded his right in the Hundred Court. If at the third time he has no justice, then let him go at the fourth time to the shire gemote (County Court); and let the shire appoint him a fourth time: if that then fail, let him take leave either from hence or thence (anywhere that he can find the *nams*), that he may seize his own."‡

Amongst the lost statutes which we may suppose to have been subsequently passed in England was probably some enactment by which this power, except in the case of distraining for rent, was taken out of the hands of the private

payment of the service, and all arrears (whatever the case might be, as damage done, some trespass, debt, or the like), then, though the caption might be just, the detention was unjust (2 Reeves, "Hist. Eng. Law," 59). "Vel si (averia) alia occasione (i. e., other than for rent or services), capta fuerint, sicut pro damno facto, vel injuriis, vel debitis, vel aliis quæ terminari possunt sine brevi domini regis, justa poterit esse captio et injusta detentio." Bracton, fo. 156.

* "Quoniam attachiamenta sunt principium et origo placitorum de *wrang* et *unlauch*, et aliorum quæ prosequuntur per *sicker borg*, ideo de attach' incohandum, &c. Aliquando enim fit per bona partis defendentis utpote in placitis de debitis et conventione et quando implacitatur de bonis mobilibus. Quia primo debent res et bona partis defendentis attachiari et teneri quousque securitatem fecerit per plegios, ad respondendum et standum juri parti conquerenti," &c.; and see *ibid.*, cxi., De Namo capto pro debito negato. "Leg. Bar. Scot."

† "Districtiones non debent capi sine consideratione curiæ," stat. 2 Rob. I., c. 15; and the previous enactment, "Nemo debet namari nisi ipse debitor et ejus fidejussor." 1 Rob. I., c. 15.

‡ This has all the air of an introductory law, yet it is repeated nearly in the same words in the laws of William the Conqueror, professing to be declaratory only of the old customs of the realm in the days of Edward the Confessor:—

"Nullus namium capiat in comitatu vel extra, nisi rectum in hundredo vel comitatu tertio postularit. Quod si nec ad tertiam postulationem responsum acceperit eat ad comitatum, et comitatus ponet ei quartum diem. Quod si nec tunc ei satisfactum fuerit, accipiat licentiam namium capiendi pro suo et prope et longe."—"Leg. Gul. Conq.," xliv.

suitor, and transferred to the bailiffs of manors and sheriffs of counties. In Ireland, where the suitor himself was his own summoner, and executed his own attachment, the restriction came later; and it is not until the time of King Henry VII. that we find it suggested by Baron Finglas, in his Breviate of the Getting of Ireland,* as an improvement on the Law of the English Pale, "that no man take pledges except for his rent." On the southern continent of Europe in the thirteenth century the recollection of distresses being taken by any but public ministerial officers had everywhere disappeared save in some municipalities; but it continued in the traditions of the Westgoths, and Norwegians, amongst whom STEIRNHÖÖK states that formerly the citation and distraint to enforce it were made by the plaintiff himself with his witnesses, until the custom was abolished by Earl Berger.†

Having seen that those apparent anomalies do not necessarily import a difference of origin between the English and Celtic methods, our attention may now be given to some remarkable features of resemblance between them. It has been observed that distress was incident to the institution of actions of various kinds in the time of BRACTON; but it did not constitute the first step. The regular process of the Common Law was by Summons, Attachment, and Distress;‡ and it will have occurred to the mind of the legal reader that these proceedings correspond in a remarkable manner with the three initiatory steps of the Irish action—first, the notice; secondly, leaving the distrained beasts under a lien in the hands of the owner during the stay; and, thirdly, driving them at the expiration of the stay to pound. The series of processes was obviously devised in early times with a view to give repeated opportunities for the adjustment of claims without the necessity of resorting to a court; and one cannot but admire the simplicity and efficiency of the means employed. The attachment, in particular, is an excellent expedient for enforcing compliance with a just demand, without depriving the debtor of the use or apparent ownership of

* Harris, "Hibernica," p. 97.

† Steirnhöök, "De Jure Sueonum," p. 110, de namo seu repressaliis—"Fieri enim non debuit nisi post rem judicatam—de jure Westgothico etiam re non judicata—idem juris in Norvegia fuit requisita tamen prius a præfecto regis licentia"—and adds a remarkable point of resemblance to the Irish method, "Executio non tantum in principalem reum sed et in agnatos et cognatos."—pp. 125–129.

‡ Tidd. "Prac.," p. 126, *et seq.*

his property. It occupies a prominent place in the early Scottish law, where its definition is in entire accordance with the idea of a ligature or binding, conveyed by the Irish *astad.** This idea of a legal bond being fastened on the subject of the attachment preliminary to its actual removal, enters into the word *distringo.* A want of attention to the radical difference of meaning between *distringere* and *distrahere* seems to have led Lord Bacon, and after him Chief Baron Gilbert, and the body of the text writers, to refer distresses to post-feudal origin :—

"The distress is a remedy given to the lord, to recover the rent or services which the tenant hath obliged himself by his feudal contract to pay, by way of retribution for his farm. The non-performance of these services was by the old feudal law a forfeiture of the feud. . . The rigour of this law was mitigated with us, and these feudal forfeitures changed into distresses, according to the pignorary method of the Civil Law, from whence the notion seems first to have been borrowed, as may be seen by the title *de distractione pignorum* ('Dig.' l. 20, tit. 5, l. 8), for there appear no footsteps of it in the feudal authors."†

But the *distractio* here referred to was the sale by way of execution, not the seizure by way of process, of the goods;‡ and the author of the title in the "Abridgment," as if doubting the solidity of the reason, adds with more correctness :—"From whencesoever the name or notion came, the remedy obtained so early in our law, that we have no memorial of its original amongst us."

Besides this correspondence of process in its preliminary steps, the legal reader will have been struck with the statement that the debtor might at any time before forfeiture regain the possession of his goods, on giving sureties to try the validity of the distress at law ; which is, in form and substance, the Common Law right of *Replevin.* This action has hitherto been supposed, on the authority of "The Mirror," to have been invented by Glanvil, Chief Justice of

* "Attachiamentum dicitur quoddam *vinculum* juris per quod pars defendens invita *astringitur* ad standam juri et respondendum parti quærenti."—"*Leg. Bar. Scot.*," *Q. A. c.* 1. *s.* 2.

† Bac. "Ab.," Distress, Introd. citing Bac. "Gov.," 48 ; Gilb. "Dist." 1.

‡ Cod. lvii., tit. 53, No. 1, "De executione rei judicatæ. Nimis propere judex pignora Marcellæ capi et distrahi jussit, ante rem judicatam. Prius est ergo, ut, servato ordine, actionem adversus eam dirigas, et causâ cognitâ sententiam accipies."

Ibid., No. 2. "Si causam judicati non novasti, rem judicatam Præses provinciæ etiam pignoribus captis et distractis ad emolumentum perduci jubebit."

Henry II.* How such a statement could have been so long received as authentic is difficult to understand. The right to replevy is the inseparable correlative of the right to distrain, which the laws of Canute had shown in general operation more than a century before the time of Glanvil. All the forms of replevin refer to a period when cattle were the recognised representatives of wealth. It is an action now peculiar to our insular laws, which had been so far forgotten on the continent of Europe in the sixteenth century as to enable Sir THOMAS MORE to puzzle foreign legists by his well-known question as to the *averia carucæ capta in vetito namio.* Its existence as part of the early Brehon code in Ireland should go far to satisfy the most unwilling minds that it was not unknown in Celtic Britain.

Wherever the law of distress and replevin existed, there must necessarily have been a law of the pound. It appears that there were in every Irish territory or lordship no fewer than seven public *foruses*, or open pounds.† It is hardly conceivable that similar arrangements should not have existed in Britain before the ninth century; yet Sir HENRY SPELMAN, finding the expression *mannire ad parcum* in the Laws of the Ripuarians, deduced from that fact the conclusion, hitherto not dissented from by any English jurist, that the native British were beholden even for their knowledge of the use of a pound to our Saxon ancestors.‡

Before leaving the general subject of distress, an observation may be made on a striking point of similarity between the Irish law, as we find it in these very early times, and the law of England, as it is supposed to have been reformed by the Statute of Marlbridge,§ enacting that no one shall drive his distress beyond the county wherein it is taken; as well as with the law of Scotland, as that law also is supposed to have been reformed by the earliest Scottish Statute the provisions of which so closely resemble the Irish custom, that it may be convenient

* 3 Blackstone, "Com.," 146, citing "The Mirror," c. 2, s. 6.

† Viz., the pound of the Ollamh, the pound of the Brehon, the pound of the Aire-iter, the pound of the Aire-desa, the pound of the Aire-tusi, the pound of the Aire-ard, and the pound of the Aire Forgaill.—"Sen. Mor.," p. 293.

‡ "Parci autem hujusmodi usum e continente traduxisse Saxones nostros hinc intelligas quod in Ripuariorum legibus jam olim utpote 800 vel 900 annis reperitur. Sic enim tit. 82, s. 2. Si quis peculium alienum in messe adprehensum ad parcum minare non permiserit 15 sol. culpabilis judicatur."—Spelm. "Gloss.," *ad verb. Parcus.*

§ 52 Hen. III., c. 4.

to transcribe them:—"If any take *nams* for any debt in the land of any lord without the license of the lord or his bailiff, and the same *nams* shall not manifest publicly, coming and going, and shall be followed by the owner, and so taken, let him be dealt with as with a man taken in theft." Compare the corresponding Irish custom:—"There is half fine of theft for carrying away a distress . . . from a territory, even though it be taken to the pound of a chief church or of a king; but full fine for theft lies against the plaintiff for carrying distress across a boundary, without bringing it to a chief church, or a king in the [external] territory."* Again, by the Scottish enactment, the takers of distress outside a territory "ought, at the border of that territory, to exhibit the animals distrained to witnesses there present, and in like manner to all who meet them by the way; and [if not] let the *nams* be remitted on security to the place where first they were taken; and let the taker come there and seek his debt, if he will;"† and by the Irish—"If the defendant goes in pursuit of the distress beyond the boundary, and offers pledges and a hostage for it to the plaintiff, and [it be] that they [the pledges] are not taken from him, he is safe in taking it [the distress] from the plaintiff, and there is no suit necessary, but simply to retake it."‡

How shall we account for the Irish of the eighth or ninth century, if not of earlier times, having had a law against removing distresses from the districts in which they were taken, and for the English and Scotch having remained without regulations of such obvious convenience until the thirteenth and fourteenth centuries? The explanation of so strange an appearance of superior social arrangements in this country is doubtless to be found in the declaratory nature of these English and Scottish Statutes; and we must deem those historians to be mistaken, who, from the introductive appearance of such enactments, have con-

* "Sen. Mor," p. 223.

† "Si quis namos ceperit pro aliquo debito in terra alicujus domini sine licentia illius domini vel ejus ballivi, et namos non manifestaverit eundo et redeundo cum namis, et prosecutus fuerit per illos quorum bona sunt et sic captus fuerit, statim fiat de eo sicut de homine capto cum furto. Debent ad exitum illius terræ manifestare animalia capta testibus ibidem existentibus, et similiter omnibus venientibus illis per viam; et remittentur namii ad plegium ad locum a quo prius capti fuerunt. Et ille qui namos cepit veniati bidem ad petendum debitum suum si velit."—"Reg. Maj.," l. iv., c. 22. Re-enacted by Stat. 1 Rob. I., c. 7.

‡ "Sen. Mor," p. 221.

cluded that before their passing no law existed against the mischiefs which they profess to remedy. This mode of arguing to the prior barbarism of populations, from enactments assumed to mark the first introduction of social ameliorations, enters largely, and probably to an undue extent, into the works of modern historians.

The review of the several points of identity, or of more or less resemblance between the Celtic and English Common Law systems of distress and replevin, has proceeded so far on the assumption that the text and glosses generally of the *Senchus Mor* are of the high antiquity indicated above. A more minute examination will now be made into the practical operation of the Irish law, as exemplified in that portion of the work the antiquity of which is vouched by citations both from text and gloss in Cormac's "Glossary," and from which it will be seen that various forms of legal actions, and numerous legal principles still recognised in our law, were in use among the Irish in times of very remote antiquity.

This portion, purporting to be a statement or report of proceedings by way of distress brought by Asal against Mogh, son of Nuadat, to try the title to certain lands in Meath, is in the original text fragmentary, extremely concise, and remarkable for its every word, so far as the language can now be understood, being pregnant with meaning. In some portions of the story, short as it is, there is reason to think that even the gloss writers have mistaken the sense; and one of the glosses, and that apparently the oldest, hangs a wild and fantastic fairy legend on some words which possibly had been distorted from their original meaning before meeting the eye of the scribe. Yet this gloss is referred to in the first commentary, and the first commentary itself is cited, with a passage of the original text, in the *Sanas Cormaic.**

Before giving the original text, some traditionary statements have to be mentioned from these primary and secondary glosses. The period of the events described would, according to the ordinary chronology, be not later than the generation after Con, surnamed of the Hundred Battles, when Coirpre, or Cairbre, surnamed Gnathcoir, or the Just, some centuries admittedly before the time of Patrick, was *regulus* of Ulster. This Coirpre is stated to have been third in suc-

* Sub voce *Flaith*, ubi supra.

cession from Fergus, son of Ledi, whose successors were, as it is said, Fergus son of Roy, and Conor son of Nessa. This Fergus "Ledides" had received into his protection Eochaid, an outlawed brother of the reigning monarch, Con. A son of Con, accompanied by four kinsmen and their sister's son, Foitline, pursued the fugitive, and slew him in Fergus's territory. Thereupon—

"Fergus," says the gloss,* "went with forces from the north to demand satisfaction, and justice was ceded to him, i. e. three times seven 'cumhals,' seven 'cumhals' of gold, and seven of silver, and land of [or for] seven 'cumhals;' Inbher Ailbhine, *by name*, for the crime of the five natives (i. e. of Asal, and of the uncles of Foitline); and Dorn (the mother of Foitline) was given as a pledge for the crime of her son, for he was the son of a stranger or Albanach."

From this it is to be understood that, while the brothers of Dorn were treated as natives, or "*urrhads*," in the imposition of their fines, a different rule was observed in the case of their nephew Foitline, as being the son of a foreign father or "*deorad*," contrary to the maxim of the Civil Law, *partus sequitur ventrem*, and conformably to the rule of the Common Law, which ascribes to the son the *status* of the father.† The bondmaid Dorn afterwards provoked the anger of Fergus by reproaching him with a personal blemish, for which, in a fit of passion, he slew her. One hundred and forty years, says the gloss, elapsed. Coirpre, succeeding to the kingship of Ulster, continued to occupy the pledge-land of Inbher Ailbhine by his steward, Mogh. The tribe of Con—to whom the land had belonged previous to its pledge—who appear to have been the kindred of Dorn, conceiving that by her death the debt incurred by the crime of her son had been discharged, resolved to make claim to the land; but, owing to some unexplained cause, delayed to do so until it had become a question whether the period of prescription which would have barred their right had not elapsed.

The existence of a law of prescription among the native Irish of this period will appear strange to legal minds. Prescription has hitherto been regarded as a rule borrowed from the Civil Law. It is evident, however, that in this particular case the *usucapio* of that system could have had no application.

* Sen. "Mor," 71.

† Fortesc. "De Laud. Leg. Angliæ," c.xlii.

"*Usucapio*, or the right acquired by long occupancy, should be founded on a just title; but there can be no *justus titulus* on which the *usucapio* can proceed when the person is in possession of property delivered to him in pledge."* The Irish *rudrad*, which did affect the pledge-land, must be taken to have been of some other origin. The gloss, in stating the time during which it had been out of possession, uses another expression which will strike the legal reader. It was so long "since there was *anfis* (translated 'ignorance') respecting it," suggesting the "beyond the time of memory" of our legal phraseology.

It would appear that it had become a question whether the period of prescription had not run, so that there would be legal *anfis*, or "non-knowledge," of the land having ever been theirs, when the tribe of Con resolved to attempt the recovery of it. The period was that of three successions in the kingship; and the question was, whether one of these, a disputed succession, should count.† The means by which this obstacle was surmounted suggests an acquaintance with the legal force of an acknowledgment of title, as removing the bar of the arbitrary period of prescription. Asal, steward, or bailiff of the claimants, put his horses on the land. Here we have what would now be called "entry." Mogh drove them off, which would now be called "ouster;" accompanying the act with words to this effect:—"Is it the reason that thou hast put thy horses in here, because it was taken from thee formerly?" "Was it from us, then, it was taken?" said Asal, and on that admission proceeded to distrain.‡

So far the narrative is preliminary, and has been drawn from the primary glosses. We now proceed to the original text, which is given as translated by Dr. O'DONOVAN. Some of the words' apparently unimportant, and for that reason assumed to be mistranslated or corrupt, are enclosed in brackets.

* Burge, "Col. Law," vol. iii., p. 8. The Irish and the Roman Law are alike founded on the neglect of the owner. "Bono publico usucapio introducta est ne sentiant quarundarum rerum diu et fere semper incerta dominia essent; cum sufficerit domino ad inquirendas res suas statuti temporis spatium." "Dig.," l. xli., tit. 3, l. 1. *Fallach cach rudrad*—"Every prescription is neglect." "Sen. Mor," 192. The principle has been thought peculiar to the Roman Law. "Some of the cities of Gaul enjoyed the *jus Italicum*, which conferred the capacity of mancipation, legal prescription, and vendication."—1 Spence "Eq. Jur." 31, *n*; citing Savigny, "Mid. Ages.," tom. i., 63, 4.

† "Sen. Mor," 74, n.

‡ "Sen. Mor," 75.

"Teora ferba [fira] do snacht Asal ar Mug mac Nuadat, gabail co toxal; co foetar aidchi Fertai for Boind; asluiset huadaib; facubsat a laegu; laith find for tellraig. Etha aniarair co tocta se delechaib treibi ar toidruich. Gellta dib iaram la Coirpre nGnathcor, di gabail, di athgabail, di detiu, di chomdetiu, di aircsiu, di aititiu.

"Three [white] cows were taken by Asal from Mogh, son of Nuadat, by an immediate seizure; and they lay down a night at Ferta,* on the Boyne; they escaped from him; they had left their calves; and their white milk flowed upon the ground. He went in pursuit of them, and seized six milch cows at the house at daybreak. Pledges were given for them afterwards by Coirpre Guathchoir, for the seizure, for the distress, for acknowledgment, for triple acknowledgment, for acknowledgment by one chief, for double acknowledgment.

"Tir-ba Chuind Cetchoraig, as a ngabaid ilbenda, berta Fergus Ferglethech, i ndigail a thromgreisi, di guin Echach Bélbuide. Bretha Dorn in ansaire. Do ceirr ina firinde sich i ngnuis Fergusa. [Ferais Fergus ferechtus Finech i lLoch Rudraide di marbad a marcinta]. Taisic a thir, imurro, foselba hi Cuind Comarba."

"The Tir-ba of Conn Cedcorach, from which these horned cattle had been taken away, had been given to Fergus Ferglethech, in atonement for the great injury done him by the killing of Eochaidh Belbhuidhe. Dorn also was given to him in bondage. She was killed, in her truth, for remarking *the blemish* on the countenance of Fergus. [Fergus made a manly attack upon Finech, in Loch Rudhraidhe, to kill it for its great depredations]. His land, however, was restored unto the possession of the heir of Conn."

"*By an immediate seizure*" *gabhail co toxal*, seizure with asportation; as contradistinguished from seizure by way of attachment.

"*They escaped from him; they had left their calves.*" The gloss informs us that Asal made his seizure of the three cows out of doors, their calves being shut up within. The suggestion appears to be that Mogh's act, by keeping back the calves, was equivalent to a recall of the cows as soon as they should have an opportunity of escape.

"*Their white milk flowed on the ground;*" literally, "milk white on ground;" on which two points may be noted; first, that the cows had not been milked by the distrainer, although they had been *levant and couchant* in his hands, recalling the old and not very reasonable Common Law rule, that "if a man take a cow for a distress, he cannot milk her; for though the cow be

* Now *Slane.*

the better for this, yet he ought not to do good to the owner without his consent;"* secondly, that, in making fresh pursuit, the track of the milk on the ground may have been considered a constructive keeping in view.†

"*He went in pursuit of them, and seized six.*" The first seizure of three was the *gabhail*, or *nam;* the second seizure was the *athgabhail* (*aitherrach gabhail*),‡ or *withernam*, which, in Common Law, either party might take, by way of reprisal, on an *eloignment*, or putting of the distress out of the way, by the other. It was the remedy usually resorted to by the owner, when the distrainer had not the cattle forthcoming to be replevied; and the distrainer had the same right against the owner, when by his default the cattle, after being replevied, were not forthcoming on judgment of return. The gloss writer, in endeavouring to make the meaning clear, has had recourse to Latin, which, being more liable to miscopying, has now become very corrupt—*tres vocarum tres vocarum tremarum secundarum;* obviously what was originally written was *tres vaccarum, tres vaccarum namarum secundarum*, or twice three cows for the second seizure, or taking in *withernam.* But in the writs which have come down to us,§ it is only beast for beast that is to be taken in this kind of reprisal. That this, however, was not always so we learn from Bracton:—"If the sheriff could not find the cattle to make deliverance of them, and it appeared that they were driven away, then, if the taker had any chattels in the county, the sheriff's officer was to take some of his cattle to *double the value*, and to detain them till the distress was brought back,"‖ where we have another example of a change in the old Common Law, probably effected by lost Statute, between the time of BRACTON and FITZHERBERT.

"*Milch cows*," literally, "from amongst the milking, or milkable cows;" for, although the three might not be milked, not so the six. By the Common Law, there was this distinction, that the beasts taken in distress could not lawfuly be worked, but the distrainer might work those taken in *withernam.*

* Rolle, Ab., 648.

† Query, *Isin lo fintaitnemach for tullrech in talman* "(lac) splendid econspicuum sub dio super faciem telluris," rather than, as translated, "In the bright, beautiful day, on the face of the ground."

‡ "Sen. Mor," p. 66.

§ Fitzherbert, N. B. (69).

‖ Reeves, "Hist. Eng. Law," vol. i., p. 49. "Si autem (averia) inveniri non possunt, eo quod alibi fugata sunt forte, vel extra comitatum in fraudem, et captor terram habuerit in comitatu et

"*At the house;*" rather, "from the house." The first distress, the Goss informs us, had been taken from without; the *withernam* was taken *o dorus tighe*, "out of the door of the house." At Common Law, doors could not be broken to come at the distress, except in case of rescue. What had occurred might, at the present day, be held to amount to a constructive rescue. "If cattle, being driven to the pound, escape, and go into the house of the owner, if he that distrained them demand them of the owner, and he deliver them not, it is rescue in law;"* and where what occurs amounts to a rescue in law, it justifies a recaption by breaking doors on fresh pursuit.†

"*At daybreak;*" or, as the gloss expresses it, "At the red-streaking of the morning." By the Common Law distresses, except of beasts *damage feasant*, could not be taken at night.‡

"*Pledges were given for them afterwards.*" Having terminated the distress, we now come to the replevin, which, it will be observed, consisted, first, in giving pledges or sureties as well for the *gabhail*, or original distress, as for the *athgabhail*, or *withernam*.

"*By Coirpre.*" Observe, here a new actor comes on the scene. The preliminary steps of the litigation had been transacted between Asal and Mogh, the stewards or bailiffs of the real litigants. The replevin is instituted by Coirpre, who takes the place of Mogh; while, as will presently be seen, Asal gives place to the tribe of Con, the former owner of the land. Coirpre is lauded for his ready submission to the terms imposed on him as a condition of defending his possession. These included security for what is called *detiu* of one, of two, and of three. This the gloss explains as security for some liability in respect of his own, his predecessor's, and his ante-predecessor's time. As against this some security of the same nature was entered into on the other side, but limited to the time of one. Whether these were analogous to the wagering deposits, or *sacramenta*, made by the parties to a primitive

catalla capiat serviens domini regis de averiis illius in duplum, et illa detineat donec averia sic abducta deducantur."—Bracton, fo. 157.

* Co. Lit., 161 a.

† *Rich* v. *Woolley*, 7 Bing., 651.

‡ Vin. "Ab.," Distress, O. 2, No. 14, where see example of an action of trespass commenced by attachment of defendant's cattle, in 37th Eliz.

Roman action, or were in respect of some liability to account for the profits of the land, can only be conjectured, and in the present state of the writer's information he must leave this part of the case in obscurity. What is of more importance is to note the fact that, by Asal's entry and expulsion, and his action in taking a distress for that supposed trespass, the title to the land was brought in question between the really interested litigants, and the possession changed, substantially as it would have been at English Common Law in an action of ejectment.

The received idea of the origin of actions of trespass and ejectment is, that they were invented by the judges in the reigns of the Edwards; and it is said that it was sometime in the reign of Edward IV. that possession of the land was first recovered in a proceeding of this kind.* When we consider that one of the manuscripts of the *Senchus Mor*, still in existence, was transcribed from older documents more than a century before the accession of Edward IV.,† and when we find there the story of a case having all the substantial elements of an action of trespass and ejectment alleged to have been adjudicated on more than 1600 years ago, and find the text of that story regarded as a record of authentic antiquity prior to the 12th century, the mind is filled with amazement at the vast obscurity which still overshadows the origins of the English Common Law, and the hopelessness of penetrating which has caused men of the greatest learning and candour to ascribe to the invention of judges of the fourteenth and fifteenth centuries modes of proceeding, and methods of attaining justice, which, if they existed in Ireland, must have been equally in exis-

* The action of ejectment, *Ejectione firmæ*, appears to have been invented or brought into use in the time of Edward II. or III. The action, which was strictly an action for damages, was given to a tenant for a term of years who complained of a forcible ejection or ouster from the land demised to him. In favour of this mode of remedy the Courts determined, probably by analogy to the *interdictum unde vi*, that the plaintiff might recover (as he might in an assize—"Fleta," ii., 1, 17), not only the damages he had sustained, but by way of collateral relief the possession of the land itself for his term. According to Sir MATTHEW HALE, it was sometime in the reign of Edward IV. that possession might be obtained by means of this action. (SPENCE, "Eq. Jur.," vol. i., p. 232–3, and note).

† The MS. H. 2, 15, T. C. D., contains an entry which purports to have been written on Christmas night, A. D. 1350, by Hugh, son of Conor Mac Egan, who states the book to be at that time the property of his father.

tence in Britain long before the introduction of those writs of Assize which they are popularly supposed to have superseded.

"*His land, however, was restored into the possession of the heir of Con.*" The land, as will be remarked, had been given in pledge for a portion of the eric. That this hypothecation was in the nature of a Welsh mortgage may be collected from the gloss:*—"The woman committed an offence for which she was forfeited, and the land did not commit any offence for which it could be forfeited;" so that the proceeding might be likened to an ejectment against an overpaid tenant by *elegit*, or mortgagee in possession by grant *quo usque.* The right to the possession depending on the question whether the debt to Fergus had been satisfied, the claimants sought to set off the fines due by him for the death of Dorn against the balance remaining due to him for the death of Eochaid. Set-off is another supposed loan from the *Compensatio* of the Civil Law. The reason why it is said not to have existed at Common Law is, that to allow a party the benefit of set-off would, in effect, have been trying an action without a writ;† but we are here dealing with times before writs had been invented, and the question presents itself, whether this natural and equitable right did not exist before the course of the Common Law came to depend on the seals and writings of the king's superior courts? If it be found existing in Ireland, not as a loan from the Civil Law, why not have existed in Britain as portion of the primitive Celtic Jurisprudence?

The *Compensatio* of the Civil Law applied only between individuals, and in the same right. In the *Comardugad*, or adjustment, as it is termed, which was made on this occasion between the claimants of Inbher Ailbhine and Coirpre Gnathcoir, the principle of mutuality can only be discovered by regarding the individual rights as merged in the rights of the two communities between whom the substantial litigation took place. This is the point of view in which the gloss puts it.‡

"A balance was struck between the crimes here; i. e., Eochaid Belbhuidhe was killed while under the protection of Fergus, who, being the king of a province, was entitled to

* "Sen. Mor," p. 77.

† Spence, "Eq. Jur.," vol. i., p. 651.

‡ "Sen. Mor," p. 77.

eighteen 'cumhals;' there were also due to him nine 'cumhals' for Dorn having reproached Fergus with his blemish; so that there were altogether twenty-seven 'cumhals' to Fergus. Honor-price was demanded by the Feini for the killing of the pledge, and for it twenty-three 'cumhals' were payable. Buidhe, son of Ainmerech, was entitled to *eneclan** for the killing of his daughter; i. e., he was an aire-Forgill of the middle rank, and was entitled to six 'cumhals.' Her brother also was entitled: he was an aire-ard, and was entitled to four 'cumhals;' so that this, which the Men of the South demanded, amounted to thirty-three cumhals; and the Men of the North demanded twenty-seven; and a balance was struck between them; and it was found that an excess of six cumhals was due by the Men of the North, for which Inbher Debhline was again restored by the Men of the North."

This clothing of one member of the community with the rights and liabilities of others recalls some early English municipal customs, in principle not dissimilar, and which were received as good customs at Common Law in the time of Fleta:—

"If any person of any city, society, or merchant guild was indebted to some one of another city, society, or merchant guild, and if any other of that city, society, or merchant guild came to the city, society, or merchant guild where the creditor was, the creditor might charge such foreigner with the debt of the other."†

As against which, if the foreigner could have set off a debt due to one of his community by some other of the community of the charging creditor, it would make the case in all respects parallel to that in the text.

The existence of a number of petty states would lead us to expect some rule of intertribal or interterritorial law; and it would appear that there existed in the Brehon code certain regulations called "*Cairde*" law, or rules of amity between tribe and tribe, applicable to such a case as we have been considering.

The business of making such regulations was transacted at general assemblies, at which the members of each tribe of a certain rank were com-

* This *eneclan*, translated "honor-price" by Dr. O'DONOVAN, seems the equivalent of the *enach* of the Gaelic law of Scotland. "Item le *cro* et *galnes* [*query*, the "Galanas" of the Welsh code] et *enach* uniuscujusque hominis sunt pares, scilicet in respectu fœminarum suarum."—"Reg. Maj." l. iv., c. 36, No. 7.

† REEVES, "Hist. Eng. Law," vol. ii., p. 114, citing "Fleta," i., 2, c. 56.

pellable by distress* to attend, as those of inferior rank were compellable in like manner to do suit at the court of their district.

It was at a Dal-creiche, or General Assembly of the greater kind, held at the hill of Usnach, that the controversy as to the lands of Inbher Ailbhine was determined. It was attended by the three great free Tribes of the Ultonians, the Feini of Tara, and the Lagenians. The judge who presided was, it is stated, Sean, or Sencha, son of Aighe or Ailill. "He," says the Gloss,† "made a restoration of the land into the possession of Con Cedcorach and his tribe; and he gave a restoration of the distress"—that is, by Coirpre, who had replevied it, to Asal, who had distrained it; just as would be done in the Common Law action of Replevin, by the award of a *retorno habendo.*

The statements of the land being restored into the possession of the heir of Con, and into the possession of the tribe of Con, seem to indicate that the litigation was conducted by the tribe on behalf of its members; and that, on the recovery of the land by the tribe, the heir of Con was by them put into possession. This would argue that, as between tribe and tribe, or in what seems to have been called "cairde" law, the land was deemed the property of the community, although in the internal regulations, or "urradhus" law of the tribe itself, each family might have, at least in some of the lands, a separate inheritance.

The mention of a separate inheritance in lands of native tenure amongst the Irish will seem strange in the eyes of legal readers, who will have the Reports of Sir JOHN DAVIES in their recollection, as well as of those who have cared to acquaint themselves with the received opinions of English historical writers on this subject. These opinions are all derived from the common source of the Resolutions of the Irish Judges, in the case of the Irish custom of Gavelkind, in 3rd James I.,‡ reported by Sir JOHN DAVIES. These resolu-

* "Distress of three days for every failure of *sloiged*, translated, 'hosting,'—viz. going to the wars, going on a *creich*, and going with (to meet) the king to make laws (*cana*), or interterritorial regulations" (*cairde*). Hence it would seem they went armed to council, like the old Germans and Gauls.

† "Sen. Mor," p. 79.

‡ DAVIES, "Reports," p. 134.

tions in effect affirm, that all the land of an Irish territory except the portion reserved as mensal land for the household of the chief, was subject to repeated partitions among all the members of the tribe; so that, "by reason of the frequent translation of the tenants from one portion to another, all the possessions were uncertain; and the uncertainty of the possessions was the very cause that no civil habitations were erected, no enclosures or improvement was made of the lands in the Irish countries." It will probably have occurred to the reader, that in such a state of society it would have been very unlikely that the laws which have so far been the subject of investigation should have had an existence, or that any case of inheritance in the lands of Inbher Ailbhine should ever have arisen: so that, unless all the matter here discussed be a delusion, we should conclude, either that the original constitution of the Irish chiefry had undergone a change, by which all separate property had disappeared, or else that the Irish Judges have left that essential element of the Irish Tribe system unnoticed. That a change should have taken place here, the converse of what is known to have taken place elsewhere—as, for example, in the English manor, where the *Folk*-land has everywhere been transferred into *boc*-land—seems highly improbable; and there are some facts connected with the passing of these Resolutions, and the use afterwards made of them,*

* They are not grounded, as in the case of "Tanistry," on special verdict or other authentic finding; but the Judges take upon themselves to state the facts, as well as the law. On their delivery, they were enrolled in the proceedings of the Irish Privy Council—an unusual, and, it may be thought, a suspicious proceeding. Soon after, the Lord Deputy proceeded to take the Inquisitions on which the forfeited estates in Ulster were seized into the King's hands. Sir JOHN DAVIES thus describes the use made of the Resolutions, when the native Irish landowners of Cavan sought to traverse the Inquest of Office found at the Cavan Summer Assizes in 1610:—

"The inhabitants of this country do border upon the English Pale, where they have many acquaintances and alliances, by means whereof they have learned to talk of a freehold and of estates of inheritance, which the poor natives of Fermanagh and Tyrconnell could not speak of, although those men had no other nor better estate than they; that is, only a scambling and transitory possession, at the pleasure of the chief of every sept. A lawyer of the Pale, retained by them, did endeavour to maintain that they had estates of inheritance in their possessions, which their chief lords could not forfeit; and therefore in their name desired that they might be admitted to traverse the Offices which had been found of those lands." A traverse would have put the facts in course of authentic ascertainment. The Attorney-General, however, insisted,

which should make us slow in concluding that they afford a perfectly accurate key to the Brehon system even as it then existed. The picture, however, thus presented of an inferior civilization, has so taken the imaginations of English historical writers, that we find, for example, SIR FRANCIS PALGRAVE, one of the most learned and ingenious of that illustrious class, enforcing on the attention of his readers the radical difference which existed between even the Welsh system, as disclosed by the Laws of Howel—in which there was a large portion of what has been considered inheritable land, in every district—and that of the Irish, under which he represents all the land to have been thrown into an annual hotch-pot, rendering civil inhabitancy impossible. "We must bear in mind," he says, "that their habitations were merely encampments on

"If they have an estate of inheritance, their lands ought to descend to a certain heir; but neither their chieferies, nor their tenancies did ever descend to a certain heir. Their chieferies were ever carried, in a course of tanistry, to the eldest and strongest of the sept, who held the same during life, if he were not ejected by a stronger. This estate of the chieftain or tanist had been lately adjudged no estate in law, but only a transitory and scambling possession. Their inferior tenancies did run in another course, like the old Gavelkind in Wales, where the bastards had their portions, as well as the legitimate; which portion they held not in perpetuity, but the chief of the sept did once in two or three years shuffle, and change their possessions by new partitions and divisions; which made their estates so uncertain, as that, by the opinion of all the Judges in this kingdom, this pretended custom of Gavelkind is adjudged and declared void in law. And as these men had no certain estates of inheritance, so did they never till now claim any such estate, nor conceive that their lawful heirs should inherit the land which they possessed, which is manifest by two arguments: 1. [?] they never esteemed lawful matrimony, to the end they might have lawful heirs; 2.[?] they never did build any houses, nor plant orchards, or gardens, nor take any care of their posterities. If these men had no estates in law either in their mean chieferies or in their inferior tenancies, it followed, that if his Majesty, who is the undoubted lord paramount, do seize and dispose of these lands, they can make no title against his Majesty or his patentees, and consequently cannot be admitted to traverse any office of those lands; for without showing a title, no man can be admitted to traverse an office." On which argument the traverse appears to have been refused; "wherewith the natives seemed to be satisfied in reason, although they remained in their passions discontented, being much grieved to leave their possessions to strangers, which they had so long after their manner enjoyed" (*Letter to the Earl of Salisbury*,—DAVIES' "Tracts," 277–284). It seems very difficult at this day, with even the limited knowledge we possess of the early Irish institutions, to suppose that the claims of the Cavan landowners rested only on ideas borrowed from the Pale.

the land. We must view the Celt dwelling in wattled hovels and turf-built sheelings, which could be raised in the course of a night, and abandoned without regret or sacrifice, when the partition of the district compelled every inhabitant to accept a new domicile."*

It is not the purpose of this paper to anticipate the evidences by which, in the further publications of the Commissioners, these discrepancies may be expected to be reconciled. It may be observed, however, that in the article "Brehon Law," above referred to, some progress was made towards showing the nature of the settled and inheritable interests enjoyed by the free members of each tribe in that portion of the territory which the "case of Irish Gavelkind" in effect overlooks. The extent and importance of this division of each territory may be judged of by what has been published of the carefully regulated Law of Fences, in the "Collectanea" of VALLANCEY, and in Knight's "Cyclopædia."

The Commissioners' present volume, though conversant with the law of Distress, affords numerous incidental illustrations of a state of social arrangements in all respects similar to what we may conceive to have existed in the early Manor, while the waste or *Folk*-land continued still so far unappropriated to exclusive ownership as to afford room for common tillage, as well as for common pasture.

Distress, for example, is given for enforcing the tribesman's right to his share of the common tillage land† of the common barn and haggard,‡ of the

* "Hist. Eng. Commonwealth," vol. i., pp. 73, 75. "Whilst this community of possession prevailed amongst the entire sept in Ireland, the Cymri had gradually restrained the usage to the occupants of the villein townships. When any one villein died, the whole *tref* was divided in equal shares amongst all the inhabitants. But the custom which created this perpetual coparcenery of villein land was modified in favour of the Cambrian nobles; and a different tenure prevailed with respect to the 'Tir Gwyltyawg' the free or hereditary land, in which there was a fixed and certain property, and a definite succession; the estate being partable amongst all the lineal male heirs, according to the English custom of Gavelkind." This modification is ascribed by the learned writer, as the reader may be prepared to expect, to the influence of the northern nations (ibid. p. 77). Compare the statement as to inheritable successions in Wales under the course of English Gavelkind with the argument of Sir JOHN DAVIES, *supra*.

† "Sen. Mor," p. 175.

‡ Ibid., p. 141.

common turf bank,[1] of herding in common,[2] of the common net[3] and common fishing weir ;[4] and also for recovering his own ploughed land,[5] and grass paddock,[6] and herb garden,[7] and weir[8] and net.[9] So, one distress for enforcing the interest or duty of the tribesman in relation to the common fort of the territory,[10] and another for his own house, kiln, and mill.[11] So, while all the tribe are obliged to support the crew of a shipwrecked vessel,[12] as they seem entitled to divide the wreck,[13] the individual owner of the beach is entitled to the things cast up by the sea—that is, the salt leaf, or *dilisc*, and the crop of the sea marsh.[14] So, there is one distress for the appropriated tree in the common forest,[15] and another for a man's own timber and brushwood.[16] So, there are distresses for enforcing the making of fences between corn and grass land,[17] for fence breach,[18] for making gaps between grass-lands,[19] &c.

In the annual allotment of the commons, son and father had equal shares, and bastardy was no objection ;[20] not so with regard to the portion dedicated to family property: there legitimacy was necessary to inheritance; and we find a right of action given for the wrongful questioning of an heir's legitimacy,[21] in a contested succession to the father's *orba*, or inheritable land.

Similar incidental references to the *status* and relations of the several members of the community *inter se* are equally agreeable to the original manorial constitution, and exhibit the same amount of the elements of feudality existing side by side with tribal freedom and community of ownership.

[1] "Sen. Mor.," p. 133. [2] Ibid., p. 143. [3] Ibid., p. 131.
[4] Ibid., p. 130. [5] Ibid., p. 165. [6] Ibid., p. 133.
[7] Ibid., p. 171. [8] Ibid., p. 165. [9] Ibid., p. 163.
[10] Ibid., p. 131. [11] Ibid., p. 163. [12] Ibid., p. 129.
[13] Ibid., p. 205. [14] Ibid., p. 171.
[15] Ibid., p. 203. Confer "Leg. Salic.," tit. 27, § 28. [16] Ibid., p. 163.
[17] Ibid., p. 207. [18] Ibid., p. 175. [19] Ibid., p. 233.
[20] Davies' "Reports," p. 134.
[21] "For the wrongful sueing of a son respecting land; i. e. to question his legitimacy, to see if he should be retained, or be called a bastard," ibid., p. 193.

The community appear divided into Freemen and Bondmen, Nobles and Plebeians, Residents and Foreigners.[1] The tenant in relation to his lord is called *ceile*, the primary meaning of which is *socius*.[2] Three kinds of rent are enumerated: Rack-rent, payable by Foreigners; Quit rent, payable by tribesmen; and rents of convention:[3] these were payable half-yearly:[4] services were also rendered, such as the supply of a band of reapers to the lord in harvest.[5] The criterion of certain and uncertain obligations distinguishes the free tenants from the base.[6] Suit of Assembly has been referred to, as a duty enforcible from the tenant; so also was going to the wars, and suit of court;[7] andthe duty of repairing roads,[8] bridges[9] and fortresses,[10] lay on all landholders.

Of all the tenant class, the humblest was the *Fuidhir*. He is defined in Cormac's "Glossary," as the *Fo Tir* or "Land Underling," who obtains land under one of another tribe.[11] The obligations between him and the lord were reciprocal, and process is given to compel the lord to afford him protection.[12] It is dangerous to trust to verbal resemblances; but, if these stranger beneficaries be the parents of the feuers and feudatories of after times, we may say of them, as has been quaintly said of the copyholders, that, "though of mean origin, they come of an ancient house."

Finally, the power of distress was exercisable only by members of the tribe possessed of certain qualifications of property, entitling them to sit and act as judges in the court.[13] They who did not possess these qualifications were *ecuma airechta;* that is, were not *pares curtis*. We appear here to have sight of the first constitution of the Court Baron, and to look back into the very *primordia* of our administrative justice.

[1] *Urradh* and *Deoradh*, passim. See, as to Residents and Foreigners in respect of Court suit, *Kitchen*, 66; Fitzherbert, 160 b.

[2] The "comites" of Tactus appear amongst the Senones of Gaul, Polyb., l. 2, c. 17.

[3] "Sen. Mor," p. 159. [4] Ibid., p. 187. [5] Ibid., p. 163.

[6] Ibid., p. 42, but written in margin. [7] Ibid., p. 297.

[8] Ibid., p. 129. [9] Ibid., p. 135. [10] Ibid., p. 219.

[11] *Fuidhir, i. e. fo tir i. e. an ti do bheir tir fo na deoradhaibh a neachtair.* "Sanas Corm." ad verb.

[12] "Sen. Mor," p. 125. [13] Ibid., pp. 85, 267.

If these observations shall have disclosed a substantial resemblance between the ancient Celtic Law of Ireland and some considerable portion of the Common Law, as it existed before the doctrine of continental feuds had altered its simplicity, candid legal minds will not rest satisfied with the traditions of the sixteenth and seventeenth centuries, but will examine for themselves these fresh fountains of legal and historic knowledge, now in part laid open, and which we may hope will soon be wholly unsealed, by this Commission; and, if the result of a careful consideration of these be to confirm the views I have here ventured to put forward, it will become the duty of those who can speak with authority to teach our countrymen the wholesome social and political lesson, that all our insular populations have a common inheritance in the Common Law.

---

3 2044 018 163 493